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Farm Department.

Conducted by J. H. Brown, who lives on his farm at Climax, Mich., which is conducted as the Michigan Farmer Experiment Farm. All correspondence for this Department should be sent to Climax, Mich.

THE EDITOR'S FARM NOTES.

WINTER MAKING AND HAULING MANURE DAILY.

Last winter we hauled the manure from both cow stables, the horse stable and hog pen, directly to the field, as fast as made. It was the first winter that we continued the practice all through the winter months.

The practice and results were so satisfactory that we shall continue daily hauling and spreading during the present winter.

Last winter we used a pair of old bobsleighs for hauling, when there was any snow. The farm truck did good service when it was necessary to use wheels. Both were low down and made it very easy work to handle the manure.

We used an ordinary dirt or dump wheelbarrow to take the manure out of the cow stables. Our stables are not handy to get out the manure in any other way. The walks behind the cows are too narrow to drive through. We have intended putting up a steel track overhead, with a manure car suspended underneath, for running the manure out from the gutters and dumping into the truck or sleigh. Upon careful investigation we found that the outer door frame, and its low hanging position, precluded any satisfactory working of the carrier upon the track.

In erecting a new cow stable, we should arrange such a track and carrier system, or make the stable wide enough to drive through behind the cows. We do not like the wheelbarrow because it is too small and necessitates too much rehandling of the manure.

Have any of our readers tried the steel tray barrows, and are they durable and satisfactory for stable use? Such a wheelbarrow, with a larger steel tray, would hold a good load and not leak the liquid manure all along the walk. But it seems to us that the tray would rust very badly and the manure would stick, and prove even more unsatisfactory than wood.

STOVER FOR BEDDING.

The small amount of shredded corn stover that the cows do not eat makes the very best bedding, and a better absorber of the liquid manure than did the cut corn stover. In a shredded condition the butts of the stalks seem to absorb all the liquid they can hold.

It is much handier to manipulate the shredded stover with a fork in feeding, and it makes more satisfactory bedding in keeping the cows clean.

IS A MANURE SHED NEEDED?

It affords us some satisfaction to know that we are putting back on the land more and more of the fertil-

ity we have so long taken off by excessive grain cropping. Wherever barnyard manure was hauled out and spread last fall and winter on the grass land, we secured a better growth of corn and fodder. When manure was hauled out and spread just before plowing under, the corn was not generally so good.

If we had a good manure shed, so arranged that we could store our manure and apply whenever we wished, we should never plow any manure under.

All the manure we could make would be kept under cover and used for top dressing wheat ground in August and September, and the remainder spread as fast as made on clover and timothy sod to be turned under for corn the following spring.

There are few farmers in Michigan who own and use a manure shed, but it would pay many of us to erect a cheap one and use it daily, whenever the manure was not directly applied to the land.

Many farmers also would erect a manure shed, but for the reason that they are still using old barn buildings. They wish to build a new barn first, and hardly know where the manure shed could be placed. This is our fix, and we even hate to erect a temporary structure under the circumstances.

For us then, under existing conditions, the proper plan is to haul out the manure just as fast as it is made at all seasons of the year.

There are but a few weeks in the whole year that the liquid fertility that leaches down into the soil from manure spread daily on grass land, is not taken up by the grass roots and utilized with comparatively little waste.

In the years gone by we have produced some very poor crops of wheat and oats on our land, simply because we were constantly taking off and only partially restoring the fertility so necessary to grow even fairly productive crops. It takes some time to effect a change, but a decided improvement is already visible. Our corn crop this last season was one of the best in the neighborhood, and plenty of good manure, on a grass soil, was largely responsible for the good results secured.

We never sowed wheat on a better prepared seed bed, and never had wheat looking so well when winter set in. About one-half of a 20-acre field was thinly and evenly top dressed with the scrapings of the barn yard, and the partially decomposed bottom of the straw stack. To-day there is considerable improvement in the growth of wheat on the portion of the field that received the top dressing.

IN NORTHERN MICHIGAN.

The writer has been in this upper portion of the State during the last two weeks attending farmers' institutes. The meetings have been held "right in the woods," so to speak.

In some cases we had to ride 35 miles by stage to reach the county seat of some counties where institutes were held.

From Roscommon to Mio, Oscoda county, we rode in a stage, on runners, through 35 miles of what is called "Jack pine plains." The road winds in and out in every direction, seldom following section lines.

The country is moderately level, with but little good timber standing. What we saw is a scrubby growth of small pines from one foot to ten feet in height.

There are many open places, and quite a number of abandoned farms were passed on the road. In some places the road was through what were formerly cultivated fields, now thickly studded with Jack pines, resembling an immense evergreen nursery. Our friend, I. N. Cowdry, was with us, and he truly remarked that nearly the whole distance seemed like riding through an immense natural park.

During the whole ride from Roscommon to Mio, we saw but four or five large openings or "settlements," of from one to several hundred acres. Yet on these cleared fields we saw ample evidences of good farming.

The farmers who attended the institutes in Oscoda, Gladwin, Crawford and Montmorency counties are just as intelligent, shrewd and intensely practical as any of those living in the southern counties of Michigan. From what they told us at the institutes, and from the farm products exhibited at the meetings, we know there is much good farming being done up here, on land that certainly contains some fertility, at least.

It is claimed by some of the farmers we found in the settlements along the Mio stage road, that many of the abandoned farms were deserted by poor shiftless fellows who could not make a living anywhere. They went on to these places, worked as little as necessary, and seemed to think they could eke out an existence without hard labor.

Finding that they must get down to business and earn their bread by the sweat of their brows, the same as the rest of us have done, and are now doing, these lazy fellows pulled out for "some other place," where a "soft snap" might possibly "come their way." From what we saw of the good farming being done right in the "Jack pine plains," it looks to us as though there was something in the above statement.

We shall have more to say about farming conditions in these northern counties in future issues of this paper. Big Rock, Montmorency Co., Mich.

For the Michigan Farmer.

SWEET CORN.

I believe that if farmers in general understood the value of sweet corn, there would be much more of it raised. It is not only valuable for milch cows but hogs and horses as well. We feed

and can be topped out very nicely by binding the top layer around the top by a stout string. I noticed one man has stacked all his cornstalks in this way all alone, and they look nice and will keep well.

We never had pigs do any better than they did this fall when fed on sweet corn, stalks and all. At first when the stalk was tender, they ate it nearly all up. They would chew it up fine, and spit out the fibre after the juices were out. I did not think they would eat so much stalk when they were fed it right in a clover lot, with clover up to their eyes. If there had been no pasture for them, they would have eaten the stalks longer, but as the stalks became hard they began to eat the clover instead. It would do you good to see the little pigs eat it after the larger hogs had stripped the husks off. They had all they could eat three times a day and they did not draw on their mothers nearly so much as they would without it. We planted the Early Minnesota quite thin, and nearly every stalk had on two good sized ears. We have saved about three bushels of nice large ears for seed, that we pulled off when feeding. We do not try to save the seed from the Evergreen, as it is late to mature; we prefer to buy it. I think by saving seed of this variety year after year, it would tend to make it earlier, but at the same time it would grow smaller and the yield both in fodder and corn would be less. So we would prefer to buy our seed every year from that which has been grown farther south, and had more time to mature. This Evergreen is a slow grower at first, and looks as much like a grass as corn. It grows so slowly that it is discouraging, but later on it makes up all lost time, and when full size becomes a regular "swamp" of corn, with an abundance of long, broad leaves. To get the most and best feed this kind should be drilled quite thin and four feet apart between the rows. These two varieties of corn will furnish you with all the corn for the table from the first of August until after the killing frosts have come. Then it is a satisfaction to sit down to the table with a platter full of those large Evergreen ears boiled. Some of them are nearly four inches through, and a foot long. And by the time you gnaw four rows through the length of the ear without stopping, you will begin to understand that you have corn for dinner.

Then it is the best kind for drying purposes. The ears are so large, and the grains are so deep, that it doesn't take many of them to make all the dried corn you need. Drying should commence when the corn is quite young, as it is sweeter and more tender, and will cook up so much better.

Don't plant field corn, thinking it will take the place of sweet corn, for it won't any more than a citron will take the place of a watermelon. Then if it should happen to be a pretty good piece of corn, you will be tempted to husk it, and it will not be used for the purpose intended. So then the cows will be more apt to go on the single diet system. Now, this is no humbug about sweet corn. I know, for I have tried it. Others also have tried it, and thousands more ought to try it. It is a wonder how few plant of it. Not one in twenty, to take the country over. But after it has been given a trial it is nearly always planted.

I. N. COWDRAY.

For the Michigan Farmer.

BUSHEL CRATES AGAIN.

What you say about bushel crates is true. They have come to stay. Every farmer who grows corn, potatoes or apples should have them. I use 300 crates. Intended to have 200 more for picking up potatoes.

I use a sled, made of 3x4-inch maple or oak material for runners. I nail on boards crosswise and make sled wide enough for one crate, with a one-inch strip nailed on the edge of sled.

The sled can be made any length, but mine will hold eight crates. The potatoes are sorted as they are picked.

I think if the editor and brother farmers will use such a sled it will pay them and save great deal of labor. The sled is more convenient to load up, as you do not have to drive all over the field. I have this season handled over 1,800 bushels of potatoes this way.

Brother farmers should use crates in husking corn. Put the corn in them as it is husked. It will dry out much better, will save picking up, and then it is not on the ground to get wet and

dirty in case it rains. Brother farmers living around me think they could not farm without bushel crates.

Lapeer Co., Mich. G. W. WHITE.
(We use a low down truck to pick potatoes, but such a sled as you describe would be very handy we know.—Ed.)

A CHEAP CISTERNS.

A subscriber asks about cisterns. In this vicinity no one thinks of using any kind of material about cisterns except lime, which is put right on to the soil.

We have a mason here who begins to dig a hole large enough for him to work in handily. It is jug-shaped. If the soil is soft, and he fears it may cave in, he begins to put on the plastering. Such a cistern was built right here last year. I have one over thirty years old, and another five years old, in sandy ground. If they are not under the house, they should be arched with brick.

Livingston Co., Mich., Z. A. HARTSUFF. (Concerning cisterns, we have one that is built as friend Hartsuff describes, but it is too small. We must either make it larger next season, or build another. Which would be preferable?

The cistern is located just where we want it, but if another is built it must needs be farther away, and not convenient to pump up into the kitchen.

Would it not cost more to tear out the old cistern, take out the brick arch, dig and make it all over, than an entirely new cistern would cost? Has any one rebuilt such a cistern, and which is preferable?—Ed.)

For the Michigan Farmer.

SOME COMMENTS ON FERTILITY AND MOISTURE.

Noticing the article on page one of The Farmer of November 3, on "Tillage is Manure," I desire to add a few words by way of explanation and emphasis.

Is it not true that vegetable mold in the soil in quantity sufficient to be discernible tends to the retention of moisture? And also that a field that has yielded even an average crop, with water sufficiently supplied and all other vegetable growth absent (weeds being kept down by cultivation or otherwise), should ensure a good growth and cause a grand crop to be expected?

Does thorough cultivation also tend to the retention of moisture, having a large tendency to mulch the surface? If you never have noticed this, just go out into the street where it is sandy and where teams are continually stirring the soil; remove not over two inches of dust and, unless in a very long-continued drought, you will discover sufficient moisture to germinate a seed, if I am not mistaken.

That motto is a good one. I want to suggest another, which if I mistake not I have seen before in your columns, or some kindred paper: "The eye of the master is the best fertilizer," which motto I should recommend all farmers to hang up where they may see it as often as possible.

This teaches, to my notion, that observation is a help, and that we need not look long for what we want, but be sure you want what you look for. Remember to "see" that the soil is evenly turned over (no balks to require filling up), harrowed smoothly, marked or drilled straight, hills on the marks if planted and not too deep, and be sure no weed shows above ground.

If you have no manure, make up the deficit with cultivation, as per friend Bailey's recipe, and "see" that it ensures moisture. Last, but not least, when you go to the postoffice, or wherever the weather bulletins are posted, notice whether they say dry or hot or windy, and question if that is the weather for corn or any crop.

And if not, sit down and write a line to the Agricultural Department at Washington, asking if they had not as soon send up light showers, or heavy if needed, light breezes and sunshine in plenty, and state the lay blowers are expected, so that all produce liable to loss by rain is safely secured under cover.

After the shower is over go out and "see" to it that there are none too many stalks in a hill, and "see" to it that your family, boys and girls, or help, become interested in "seping" growth, and if you dare, hang that motto (along with friend Bailey's), where all can "see" it, and "see" that they understand the philosophy of the same.

And finally "see" if your eye cannot be trained to look for better results every year, and solve for yourself the secret of success for every one. And

if, after trying intelligently the experiment, you are not thankful for the favor granted us by The Farmer of reading each other's thoughts and commenting on them, the writer is mistaken.

Branch Co., Mich. AMERICAN.

(In a recent study of several tables of analysis of soils, we find that even some of our poorest soil contains an abundance of plant food for several crops.

An average analysis of an acre of land, eight inches deep, gives 3,217 pounds of nitrogen, 3,936 pounds of phosphoric acid and 17,597 pounds of potash. This for merely ordinary or fairly fertile land.

This would produce several large crops of wheat in succession, without exhausting the soil, and yet we fail to secure, even for the first crop, as much as the soil analysis indicates, that we might be assured of receiving.

From a careful study of soil analysis, and actual experiments in careful and thorough tillage on our own farm, on even poor soil, we are more than ever convinced that "tillage is manure."

Along with this tillage, if a moderate percentage of soil moisture may be secured when most needed in growing a crop, we are assured that a good crop may be grown on poor soil, under the general acceptance of the term.

Surely properly tilled soil, furnished with a normal amount of moisture at the proper time, will produce wonderful results, even without manure and clover.—Ed.)

THE WHEAT OUTLOOK.

Almost anything that could be said of the growing wheat (I mean the wheat that has been sown this fall), would savor of prophecy, and it is very unsafe to prophesy, for you remember Hosea Biglow said, "Don't never prophesy—unless you know."

But I think there are some lessons to be learned by our experience with wheat this fall, both in the preparation of the ground and the time of sowing. I am sure it is safe to say that farmers in Ohio never sowed wheat so late as they have this year, and one of the questions to be determined is, will it do to sow so late in this latitude?

In going from Cincinnati to Springfield on October 25, I found farmers sowing all along the way, and know that many were still sowing then in my neighborhood. In fact that was the date I finished my sowing. To be sure, the corn ground had all been sown early, in good time, but the ground was so dry that it did not start until a shower on October 11—that hardly reached the dignity of a rain—helped it to germinate, and even then it came up very indifferently, and it does not now present a strong healthy growth.

But the fallow ground was the great problem with the farmers this year, for the drought set in early and continued through the plowing and also the sowing seasons. If the drought had begun later, after the ground had been plowed and worked down so that a proper seed bed was possible, no matter how severe, it could not have been so disastrous.

But many of our farmers were trying to sow wheat after clover. The seed crop made them a little late with the plowing, and the ground had to be plowed dry. This was hard, slow work, but in the vain hope that "the early and the later rains" would still come to help the work and to reward them bounteously, they persevered through hot, dry weather until the ground was plowed and worked down ready for a rain, but too dry and rough for sowing.

Nothing could be done now but to sit and wait. The shower came, October 11, and then every farmer "pushed for life" to get his ground in order and sow. This rain was followed by extreme hot, dry, windy weather that seemed designed to lick up every bit of moisture we had just received, and in my case we made it a point to follow the harrows closely with the plank drag in order to save every possible bit of moisture.

Now, it may as well be conceded that in most, in fact in nearly all the fallow ground sown this fall, the proper seed bed was not provided, because it was impossible to do so, and that it was by the hardest kind of effort that the farmers were able to finish their sowing by October 20.

It will be admitted by all that the rise in price of wheat, and the fact that this better price is well main-

tained, has been the great stimulant that has led the farmers in this endeavor to seed an increased acreage, and if this extreme drought has deterred any in their efforts, or will diminish the yield, as is likely, it may prove a blessing in disguise, although it would be hard to convince us of this now, for the most of us feel that the next crop will bring a paying price.

November 1 we had a glorious rain, ample for the needs of the growing grain, and the weather during a portion of the month at least, was such as to enable the plants to make a fair growth before entering winter. But unless we have a winter that is very favorable for wheat—either mild and not too wet, or if cold, with abundant snow—it is safe to predict that a large acreage of the ground now sown to wheat will in the spring be planted to oats or other crops.

And so I warn all farmers to observe carefully, as I also expect to do, all conditions and circumstances connected with this unusual case that we may not again throw away our work and seed, as I fear many of us have done this year. It would almost seem that we are now in a cycle of bad wheat years, and that we are called on to use extraordinary care and judgment that our waste in energy and expense be not greater than the profits.

In our late sowing this year we have this consolation: Prof. Webster in his bulletin on insect enemies of wheat says that in order to avoid the ravages of the fly and chinch bug in this latitude, we are not safe in sowing before October 5. Well! I guess the most of us will not be troubled with fly this time.

And now in closing let me say that the last two years have given the farmer greater cause to study the wheat question than any former ten years, and if this year is to continue the same, or as I said, if we are in a cycle of off wheat years, we may yet need to study this wheat matter more diligently in order to make it a paying crop.

Butler Co., O. M. C. MORRIS.
(We never saw greater results more quickly apparent than that resulting from our thorough treatment in preparing our wheat ground seed bed this fall.

For the first month after sowing a goodly portion of the wheat in southern Michigan remained at a standstill. It looked as though it would go into winter quarters in bad shape.

However, the continued warm weather and frequent light rains have placed the major portion of the wheat on seeded ground in fine shape to pass a severe winter after all.—Ed.)

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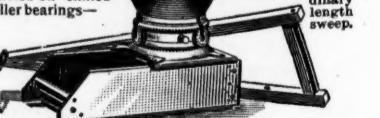
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WHAT MICHIGAN SHOULD HAVE.

There is no one point in the agriculture of this State so greatly in need of improvement as its cattle, and this need of improvement is not confined to those fed for the block, although we think they are farther from a good standard than are dairy cattle. Week after week sees droves of young thin stuff and old cows, with a few scraggy bulls and oxen, come to the Detroit yards and pass into the hands of local butchers to meet the wants of the consumers of this city. The young stock, in some instances, could have been fed longer, and better, to advantage, as they would have gained in weight and quality, and consequently been worth more per pound as well as the increased value from gain in weight. But the majority are not of a character to give much promise of returning a profit for the extra feed. They have not been bred right, are not built right, and consequently are a delusion and a snare to the feeder, and a disgrace to the farms on which they were raised. It is a case of mongrelism gone to seed. The fine grade steers of 15 years ago have nearly completely vanished, an odd one or two showing up at the yards now and then, but they look awful lonely among those scraggy animals which furnish the great bulk of the receipts. Never since its first settlement was Michigan's cattle stock in worse shape, from a butcher's standpoint, than to-day. We say it with regret, because we remember when it was very different.

What has caused this deterioration in quality and decrease in numbers kept upon Michigan farms? At the beginning the trouble was the great extension of beef cattle raising on the western ranges. Values got so low that feeding beef cattle could not be profitably carried on upon the comparatively high priced lands of Michigan and states farther East. That was the starting point. Then came the introduction of the dairy breeds, notably the Holstein and Jersey. If those who went into dairying had stuck to the dairy breeds, and left the beef breeds alone, it would not have been so bad. But they bought cows of the beef breeds, bred them to Holstein and Jersey bulls, raised the heifers and bred them, in many instances, to half-bloods of the same character. Then perhaps a bull of another dairy breed would be purchased, and the mongrels bred to him. The result has been a fearful mixture, and neither the heifers nor steers are worth a place on a good farm. They represent no breed, and, in most instances, are not possessed of characteristics which fit them for any place on an improved farm.

During the past year there have been some attempts made to improve the character of the cattle of the State so as to make them better for the block. This is seen in the greater demand for bulls of the beef breeds, notably Shorthorns, Herefords and Galloways. The latter, however, still find their best market in the West, although in some of the newer counties their ability to stand exposure, and the high value of the hides of the young stock, should make them more popular than they are. The movement to improve the beef cattle of the State should be kept up, but there is no use spoiling good dairy cattle in the attempt to make them good feeders for the block. The dairyman can not afford to spoil his herd, if he has a good one, and he ought to have a good one if he expects to make a success of the business. But the average farmer who keeps a few cows to supply the milk and butter required, expecting to raise and feed the calves as a part of the business of the farm, should not expect to have the produce of a Jersey bull from a half-blood Holstein prove a profitable investment in the feed yard. He should use beef bulls, and the best he can get. Then his calves will be worth more as yearlings than mongrels a year older. This is not a mere assertion, but a positive fact proved by the market every week. Good feeders have sold up to \$4.60 per hundred this fall, while common steers were slow of sale at \$3.50. The State is practically bare of good beef cattle, and values are certainly good enough to afford a fair margin to those who will raise them.

It looks as if the business of feeding good cattle—not scrubs or mongrels—would be profitable for some time.

ANALYSIS OF BACON.

The London Meat Trades Journal says: "Bacon has a very large percentage of fuel value. The latest official analysis shows that a portion of bacon, with the inedible parts discarded, contains 17.8 parts of water, 9.8 parts of protein, 68 parts of fat, and 4.4 parts of ash, and has a fuel value of 3,050 calories per pound. By the same analysis the edible portion of a turkey is found to contain 55.5 parts of water, 26 parts of protein, 22.9 parts of fat, and 1 part of ash, with a fuel value of 1,850 calories per pound. Codfish, edible portion, contains 82.6 parts of water, 15.8 parts of protein, 0.4 part of fat, and 1.2 part of ash, and has a fuel value of 310 calories per pound."

Those figures should be given consideration by the writers who are always attacking pork products as unfit for food. They show the great value of bacon as a sustaining food where great energy is required, or where persons are exposed to severe cold or frequent changes of temperature. They also bring out clearly the good sense of men engaged in such exacting and laborious work as in the lumber woods and mines, preferring pork to any other meats as a regular food. When the dyspeptics and theorists are through abusing the hog and its products, we hope to see scientists yet do justice to this much abused animal, against which so many of them harbor a very strong prejudice.

LIVE STOCK NOTES.

A man at Topeka, Kansas, is buying up broken-down horses, knocking them in the head, and allowing his pigs to eat them. He is taking a chapter from the book of a Lansing butcher, who was feeding his hogs in the same way until his neighbors raised such a row, and the hogs got so much cholera, that between the two the business became unprofitable.

Wilmer Atkinson & Co., of Philadelphia, send us a little volume entitled "Biggle Cow Book," by John Biggle. It is illustrated with cuts of the various popular breeds, gives methods of management from calvage to maturity, and how to make good butter, from the feeding of the cow to the packing of her product. There is a great deal of condensed information between its green covers, and it is sent by mail for 50 cents.

There were 119,188 head of beef cattle exported from Montreal during the shipping season of 1897, of which 12,221 head came from the United States. This is the largest number of cattle exported in a single season from Canada, excepting in 1880, when they were largely stock cattle for feeding. Exports of sheep and horses, however, both shew a decline from the last two years, the number of sheep being 61,254 head, and of horses 10,051 head.

That there is a scarcity of cattle in South and West Texas there is no longer any doubt. Thousands upon thousands of head of steers and she cattle have been purchased in this section during the past ninety days, and the largest per cent of these purchases will be moved to other sections, many going outside the state. The sections of Texas above referred to are recognized as the great breeding grounds for the northwest, but the number of she cattle on the ranches has been cut down each year for several years past, and hence the source of supply is limited.—Texas Stockman.

The cattle situation at present is a little unfortunate for the farmer. The supply of fat cattle is comparatively heavy and owners who have their stock in good condition are not anxious to hold. There is a strong disposition to ship cattle, even before they are in good flesh. On the other hand, the buyers want only the best, and not a great many of them, unless they are just suitable in weight. At any rate, at this season of the year there should be a closer discrimination in shipping stock. Market conditions should be studied, and only such cattle shipped as are likely to meet with the popular demand. Of course, some of all kinds are wanted all the time, but for the next three weeks the inquiry for half-fat cattle will probably be slack, as was plainly indicated by the decline in such steers this week.—Chicago Live Stock Journal.

Petroleum Department.

CONDUCTED BY DR. W. C. FAIR.

Advice through this department is free to our subscribers. Each communication should state history and symptoms of the case fully; also name and address of the writer. The initials will only be given. When an answer is requested by mail it becomes private practice, and a fee of one dollar must accompany the letter.

Influenza.—Sheep are troubled with running at the nose and eyes; eyelids very much inflamed. Scum has formed over eyes of those taken first; it makes them blind. J. M., Salem, Mich.—Give powdered nitrate of potash in their feed. Blow a little calomel into their eyes once a day.

Inverted Bowel.—Pig about two months old has a protruding bowel; has been this way for two or three days. J. M., Ono, Wis.—Apply 1 ounce acetate of lead, one quart water; if bowel does not retreat a surgical operation should be performed and a portion of bowel removed.

Question.—Having cows in calf to come in this winter, and sheep due to lamb in early spring, can I feed millet without causing abortion? C. W. A., Clarkston, Mich.—I do not regard millet as any more likely to cause abortion than many other kinds of hay or corn fodder. However, I do not think it a good plan to feed too much millet, especially if it has been allowed to go to seed and ripen.

Stocking-Dropsey.—Horse has poor appetite; circulation is weak, and legs stock; is swollen under abdomen and sheath. Appears weak in hind parts, and acts as if he could hardly move. C. L. E., Elbridge, Mich.—Horse does not digest and assimilate his food properly. Mix powdered charcoal, sulphate of iron, gentian, and nitrate of potash, equal parts; give one ounce of mixture at a dose twice a day.

Chronic Diarrhea.—Give treatment for diarrhea in ten-year-old horse. Seems to have internal fever and is very thirsty. Has been sick for the past year. G. R., Azalia, Mich.—Have his teeth put in proper condition, in order that he can masticate food properly. Give one-half ounce ground ginger, one-half ounce powdered charcoal, two drachms powdered bismuth three times a day in feed. Try a change of feed.

Surfeit—Indigestion.—About two months ago hair began to come off around young cow's eye, and has spread so that skin is bare for about an inch around the eye, and is spreading. There are a few bare spots on face. C. G., Plymouth, Mich.—Give one dram iodide of potash and two drams nitrate of potash twice a day in feed; also give plenty of salt, and keep bowels open and acting freely. Apply one ounce oxide of zinc, four ounces vaseline once a day to bare spots on skin.

Dropsey—Cow Had a Chill.—We are doctoring ten-year-old mare for bone

spavin; are using Gombault's caustic balsam. A few weeks ago swelling came on abdomen about one foot long on each side of center about the size of my wrist. She eats well and feels well; has no exercise except to water and back again; is in fair flesh. Cow was taken with a chill; refused to eat, and after two hours was still shaking. E. S. D., Grass Lake, Mich.—Give mare one-half ounce nitrate of potash a day in feed; exercise her a few miles daily. Give your cow stimulants, and clothe her warm; make an effort to equalize the circulation.

Bruised Joint.—Four-year-old colt has a swelling in hock joint, but was never lame; came on about six weeks ago, caused by kicking against side of stall; swelling is quite hard. F. S., Ruby, Mich.—Blister with caustic balsam once every two weeks. Be sure to remove cause. Turn him in a box stall.

Piles.—Horse has piles very badly; is about twelve years old. Have been feeding corn, oats and timothy hay; also, soft feed. Passes some blood and slimy-looking matter; is nervous and in poor condition; hair dusty. Eats well, but does not gain. G. P. O., Owosso, Mich.—Apply tannic acid three times a day. It is possible that he cannot be cured unless by a surgical operation.

Garget—Indigestion.—Cow came in September last; calf remained with cow about twenty-four hours. Then I began to milk her, but did not get much milk. After a few days garget set in, and kept moving from one quarter to another; finally concluded to dry her up and fatten, but was unable to dry her. Then began to slop her with large pails of bran slop without any noticeable increase of milk; then gave corn meal and buckwheat bran without success. Cow is old. A. H. L., Hubbards-ton, Mich.—Cow suffers from garget and indigestion; doubtless does not secrete milk properly; that you cannot very well remedy. She will never produce very much milk. You had better fatten her.

Sheep Have Sore Eyes.—My sheep get blind. Eyes appear weak, and water runs from them quite freely; then a white film appears and grows heavier. Ball becomes more inflamed, until it looks a smoky red, with the pupil looking like a chunk of thick matter just ready to burst. After remaining in this state a few days, they begin to get well. Some cases more severe than others. Was told of a case where a young lamb was attacked by the disease, and both eyes burst and ran out. Have never had so bad a case, but have had cases where I thought they would do the same. A. H. W., Imlay City, Mich.—Sheep have influenza; give them nitrate of potash in feed. Blow a little calomel into their eyes once a day for a few days. Give them enough Epsom salts to open bowels. Feed laxative food, if you keep them up. If they are running out, their bowels may possibly need no attention.

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The Horse.

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A FEW COMMENTS.

"Farmer," of Ingham county, sends in a short reply to our article of November 27th. With much of what he says we agree. The point of variance seems to be that he is opposed to any recent infusion of thoroughbred blood in the trotting horse. If bred entirely for speed at the trot we agree with him. We have great faith in education, and teaching a horse to confine his best efforts to the trot must certainly have its effect if continued from generation to generation. But we think the right sort of a thoroughbred can help the trotting horse where beauty and style are required, without injuring its speed.

It is not too long ago for us to remember when the late Dr. Herr was being assailed for attempting to breed trotters from Mambrino Patchen, a horse without a single trotting cross in his pedigree except that of Mambrino Chief, sired by a thoroughbred out of an unknown mare. The infusion of thoroughbred blood was too recent then, just as it is now. We don't think that infusion injured the speed of the trotters, while it certainly gave them substance, style and beauty. With the progeny of one of his sons the Hammins are right in it on the race track or in the horse show. Have Mambrino King's sons and daughters shown themselves rattle-headed and foolish? He is by a horse three-quarters thoroughbred, his dam by Edwin Forrest 49, and his granddam a thoroughbred mare by Birmingham, who was also dam of Mambrino Chief, Jr., 214.

We are of the opinion that any one who judges all thoroughbred horses by the little miserable runts which are raced from the time they are yearlings, and used by gamblers as betting machines, will make a grand mistake. Let him go to Kentucky, Tennessee, Alabama and Virginia and examine the riding and driving horses they use, and then say if they are rattle-headed or foolish. They are as good tempered and susceptible of teaching as any horses we ever saw, and yet they are either thoroughbreds or carry a large preponderance of that blood. It is true they were not harnessed and abused by trainers and rubbers since they were yearlings, to the detriment of their temper and nerves, as are most of those used for racing purposes.

As for the French Coacher an examination of the pedigrees of a score or more showed that they trace in nearly every cross to the thoroughbred, the exception being in some of them to a single cross of the Norfolk trotter Phenomenon. The stallions purchased and used by the French were some of the most noted in England. The greater substance and high action is simply the result of selection and education.

For the Michigan Farmer.
A FEW WORDS MORE ON BLOOD AND BREEDING.

I had not expected or wished to say anything farther on the subject of "Trotting-bred vs. thoroughbred sires."

From the kindly manner the editor speaks of my letter of Nov. 27th in his editorial of the same date, it seems perhaps ungenerous in me to criticize in any way any of the statements there made. And in fact I see we differ very little in opinion regarding the qualities that should be possessed by the sire in question. The bone of contention seems to be that he be allowed to call him a thoroughbred, even though he be a standard-bred trotter or a French Coacher.

Some questions are asked that I would be glad to answer, but to discuss them merely brings up the old subject of running blood in the trotter, a subject that has been worn threadbare by theorists and a few visionary breeders on the one side, and practical breeders, whose bread and butter depended on their success in business, on the other. To me this does not seem of importance as bearing on the question of the proper sire to breed to for market horses.

I endorse what the editor says of the desirable qualities of the French Coacher. But while I agree with his statement in the week before issue, that "a thoroughbred is not a trotting horse, he is a running horse," I cannot agree with him that the French Coacher is practically a thoroughbred. They are certainly very unlike our Ameri-

can thoroughbreds in form, disposition and gait.

If the law that "like begets like" will not fall in their case, the French Coacher himself should be a safe and valuable sire to breed from. But those who have had opportunity of observing in this country, on our own race tracks or breeding farms, half-bred thoroughbreds, or those results of the "recent infusion of thoroughbred blood in the trotter," the editor speaks of, have seen little resemblance in them to the French Coacher.

At the close of the article the editor gets back to the real thoroughbred and says: "The intensely bred thoroughbred, with the power to reproduce himself with great certainty, and stamp his characteristics on his colts, will, we think, etc."

Now what are those characteristics of the thoroughbred—the running horse the editor calls him? In gait is it not the run, the gait that by training and use we might say for ages has been so intensified and fixed that he knows no other gait. In disposition is it not the high-strung, excitable, nervous temperament, with other mental qualities that unfit him for the requirements of a safe and pleasant driver?

I might here quote very many experienced, well-informed and practical breeders now in the business on this point, but will take space with but one. C. W. Williams (the breeder and trainer of Axtell, 2:12, and Allerton, 2:09 1/4), whose sound judgment is proven by his work, says: "It is my opinion a thoroughbred cross in a trotting pedigree does not assist speed. I would prefer no thoroughbred blood within four or five generations. The thoroughbred blood, I think, is foolish blood, gives the horse no speed at the trotting gait, makes him stiff-kneed and rattle-headed."

Ingham Co. FARMER.

HORSE GOSSIP.

Allerton, 2:09 1/4, leads all other sires in the number of trotters entering the 2:20 list this season, having nine to his credit.

Sweepstakes, the dam of Star Pointer, 1:59 1/4, and Hal Pointer, 2:04 1/2, will soon be 28 years old. She is yet as frisky as a colt, and thought to be in foal to Brown Hal.

The Supreme Court of Massachusetts says that, where a person leaves a horse at another's stable to be boarded at a certain rate per week, and without further agreement or explanation, he cannot end his responsibility for the board by mere notice, without paying for its keep, and accepting possession of the horse. As our courts generally follow pretty closely those of Massachusetts, the above decision should be kept in remembrance by those who make a practice of taking horses to pasture.

Secretary W. H. Gocher, of the National Trotting Association, thus defines the rule as to the suppression of time: "It does not make any difference whether the suppression was on a track in membership with the National Trotting Association or not. If it can be shown that the time was suppressed in contest for purse, premium, stake or wager, or where admission fee was charged at the gate, the horse is liable for a fine of \$100 and return of unlawful winnings from date of suppression of time until the matter is adjusted. Also, such cases must go to the Board of Review and it alone has authority to remove disqualification imposed by Rule 41, Section 1."

The National American Trotting Association has placed Robert T. Kneels and H. O. Heffner, his alleged confederate, under the ban. This leaves Kneels in bad shape, as he cannot race in Europe either. It was believed Kneels' friends would be strong enough to keep him from expulsion, but it seems they were not. While the National Association, in session in New York city, were barring out Kneels, the American Association, in session at Chicago, were reinstating him, "as an act of clemency." Therefore Kneels is a fraud on national association tracks, and a worthy gentleman on those of the American association.

The Chicago Horseman has issued its annual Christmas number. While not as elaborate as former issues, it forms a valuable addition to current horse literature. There are several articles on park horses which are worthy of the attention of those who are trying to breed that class of animals. There is also a history of the Hal family of pacers, one of that great race mare Rilma, 2:10, fine portraits of

Star Pointer and Joe Patchen and a large number of half-tones of noted trotters and pacers which, while small, give a fair idea of their make-up. The half-tone from a good photograph is the only reliable method of securing a good likeness of an animal; the old engraving from a sketch by some artist has proved so unreliable that it no longer deserves attention. Then the Horseman has a complete list of the horses which have entered the 2:30 list the past season, placed under their respective sires. This is valuable for reference, and worth all that is asked for the number—25 cents.

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THE FORM OF THE MERINO.

In a recent article we took occasion to point out the injury which we believe would surely result to the American Merino if breeders, in their anxiety to meet the views of buyers, attempted to breed their flocks in a direction contrary to the type which has become identified with that breed. We have received the following comments on the article from Mr. D. P. Dewey, a veteran breeder and a man who has opinions of his own regarding the Merino and how it should be bred. Mr. Dewey says:

"Your article I have read very carefully, and indorse in the main. It is full of sound sense—more especially the closing lines. Those radical changes sought after by many, when this, or the other 'don't pay,' have never borne fruit except that of folly. Still I do not wonder at them under the pressure of hard times. I only wonder that any one possesses the determination to breed what they know to be good whether they can sell them or not. Now these closing lines have it all in, for they embrace the idea of improvement slowly, and I, for one, can never be satisfied with the ill-looking but useful Merino of the type left us by our early breeders. If the more 'angular form' referred to means we must be content with that slope to the rump, and if the 'mutton form' means to avoid a good square hind end, then again I differ. But this I can never relinquish: To be sure and keep the Merino as the bearer of the fine wool, well filled with oil, and plenty of the folds, to keep our record for thickness of fleece, and then modify by continual preference to secure the larger type, with the attractive features above referred to."

Mr. Dewey's criticism came in the form of a private letter and we hope he will pardon the use we have made of it. The point that Mr. Dewey makes regarding a sloping rump we wholly agree with. We do not consider it necessarily a Merino characteristic, although some of the most noted wool-bearers ever known had this fault. In their case it was off-set by other characteristics which made the use of the animal for breeding purposes quite proper. The article referred to was written because we found many breeders at sea as to the type of sheep they should aim to develop, so as to meet the requirements of the future. Some appear willing to change their flocks so as to conform to the type of the English mutton breeds. Others want a more rangy animal, with a delaine staple of wool, and think of crossing their flocks with a Delaine or a Rambouillet ram. To the flock of the farmer producing mutton and wool, such crossing does not do much harm, but with the breeder this is different. The results of his breeding are not confined to his particular flock, but may affect a dozen or a score of others. Therefore he should be very conservative in making changes which may prove disastrous, not only to himself, but to all his customers. If a breeder likes any one of the English mutton breeds, and believes it to come closely to his ideal of a profitable sheep, he should not spoil his Merinos by attempting to give them the same form and fleece. He will only be losing time, and is certain to meet with failure. His best course is to clear off his flock of Merinos and make a new start with the breed he admires. He will surely save time and money, and stand a much better chance of succeeding as a breeder. The same is true of the Delaine and Rambouillet. Don't use them to mongrelize your flock, but change entirely to them if they meet your ideas of what a Merino should be.

We would like other breeders of the Merino to send us their views upon this subject. We are at the beginning of a new era in sheep-husbandry. It is very essential that as few mistakes as possible be made. To that end let the men of experience in the business give others the benefit of the knowledge they have gained. We shall be glad to hear from them, and believe in this way they can do much good.

CHOOSING A BREED OF SHEEP.

From our Special English Correspondent.

A man who enters upon a farm adapted for the breeding or feeding of sheep must answer for himself the question, What breed of sheep shall I adopt? If he has previously occupied a similar farm in the neighborhood he will of course proceed mainly upon the same lines as heretofore, and will probably take a part of his flock with him when he removes. So, too, if he has been brought up in a district, and is commencing business for the first

time, he will probably adopt the breed that is commonly kept in that locality. But a farmer who has occupied a farm in one district, and who removes into a distant country, does not find it easy to come to a decision. He may have been accustomed to a particular race of sheep which are almost unknown, even by name, where he is going to make his home, and the flocks he sees there are equally strange to him. His past experience and training will be of much less service to him if he must needs keep a flock of an entirely different type, than would be the case if he could continue keeping the kind to which he has been accustomed. So in many cases he does continue to keep the same breed of sheep, and usually this proves an unprofitable enterprise. The reason of this comparative failure is not hard to find. Farmers, derided as they are by other classes of men, are not so foolish as not to know what is really the most beneficial to their interests, and though here and there one makes a gross mistake, yet the common practice of the great majority of the farmers of any particular district will be usually perfectly sound. For that practice is the result of the experience gained upon the soil, the outcome of painfully acquired knowledge. It may be taken as a general rule, applicable not only in matters ovine, but in all the concerns of farming, that one who removes into a strange district should consider the customary practices to be perfectly sound until experience shows them to be unsound. To the rule here stated there are, of course, certain exceptions. It is not intended that the reader is to understand that the customary practices are always the best, but that they should be assumed to be the best until the contrary is evident. In many districts there are several varieties of sheep kept, and the beginner is at a loss to know which variety to keep. A few years ago a particular locality affected a particular breed of sheep and scarcely any other variety was to be found there, but the times have changed since then. There is no longer any demand for fat mutton, consequently there has been a revolution in the breed of sheep kept by the farmers who are to-day endeavoring to meet the altered demand. In some cases the breed of sheep has been changed utterly, in others crossing more or less direct has been resorted to, and matters are still in a transition state. Down wool and mutton are in request, heavy coarse wool and fat mutton are at a discount. Down crosses have been largely resorted to, while the small framed and fat pure Leicesters are entirely neglected. The Leicester breeders have resorted to crosses with the Lincoln to secure greater size and heavier wool, and in some few cases to the Wensleydale for size and substance. Probably there never was a time when the pure Leicester was held in less repute than it is to-day. The result of the operations of these breeders is an animal of a larger frame and heavier fleece, which is a harder feeder and reaches maturity at a later age. In spite of the increased size, the dressed weight is no greater than before, but there is a smaller percentage of offal in the carcass. The same forces have tended to repress the border Leicester and the Cotswold, and also, though in a less degree, the Wensleydale. An impetus has been given to the breeding of Lincolns and Downs, particularly Shropshires and Hampshires, which are now being extensively used for crossing. Everywhere the changes may be seen in progress, changes caused by the attempt of the breeder to meet the change in demand, and he who now begins sheep farming is puzzled where to choose.

The aim of every sheep farmer is to produce the greatest possible worth of wool and mutton at the least possible cost, and this is so, whether he be a breeder or a feeder of sheep, or whether he is both. There are certain breeds which always command the highest prices per pound in the market, such for instance as the Southdown and the Welsh, but the merest tyro knows that if he farms good sound, rich land he can obtain better results by keeping sheep of larger frame and heavier wool. He also knows that on suitable soil Lincolns and Oxfords yield large returns, but he is at the same time quite aware that a Lincoln would starve to death where a blackfaced mountain sheep would thrive, and an Oxford would daily lose flesh where a Southdown would fatten; and he is also aware that a Cotswold or a Wensleydale would totally fail upon pasture where a Welsh mountain or a Herdwick would answer admirably. There are extremes in situations as

well as widely different properties in breeds. The great difficulty is to find the happy mean, and to confront both the tyro and the practiced hand the problem is: Given a particular farm, to know what breed of sheep will there yield the largest profit. To obtain the highest possible result it would be necessary to select a breed coming earliest to maturity, which should at the same time be the most kindly feeding, and which should produce the greatest quantity of wool and mutton of the highest value. But no breed of sheep excels in all these points, and a high degree of excellence in one point is usually accompanied by comparative failure in others. There is no race that comes to maturity earlier than the Leicester, none that produces more wool than the Lincoln, nor a greater weight of mutton than the Cotswold, nor one that is harder than the Blackfaced Mountain, nor that produces better mutton than the Southdown, nor a higher quality of wool than the Merino; but not one of these breeds combines all these valuable properties. It is unnecessary to refer to the deficiencies of each of these varieties. In many cases their failings are the necessary corollary to their excellencies. And he who finds it necessary to make a choice of the numerous varieties of sheep must take into consideration the climatic conditions of the locality, the nature of the soil, and the character of the herbage; and he must choose that particular breed whose peculiar characteristics are best adapted to the soil and the climate. He will have some difficulty in weighing and balancing the merits of different breeds, but in nine cases out of ten he will find that the general practice of any particular locality is sound, and he will do well to adopt it, and any marked departure from that practice should be very cautiously undertaken.

YORKS. AGRICOLA.

SHEEP AND WOOL.

The last Australian wool clip is said to be short, poorly grown, and tender, with a scarcity of sound combing. At the London sales now in progress, American buyers are said to be taking considerable quantities of the best descriptions.

This is the sort of rot which some agricultural papers are publishing: "It is said that Americans hardly know what really good mutton is. Nor do they know what the best bacon is. There is nearly three times as much mutton and bacon per capita consumed in England as in the United States. The difference in consumption is caused by the better quality of the English meats, resulting solely from the kind of feed." There is less mutton per capita consumed in the United States than in England because Americans have a greater variety of meats to choose from—cheaper beef, poultry, and fresh pork. The old story about the poor quality of American meats is being disproved every day in the markets of Liverpool, London and Glasgow, and that in the face of the strongest prejudices. These editors should look up the prices of American beef and mutton in English markets before they attack their quality.

The Drovers' Journal says: "Apropos to the supply of sheep on feed in Nebraska which has recently been published as coming from a Western packer, at an estimate of 5,000,000, the Drovers' Journal has taken pains to get opinions of leading sheepmen. As is natural to expect, opinions vary greatly, ranging from 500,000 to a million. R. S. Mathison, of Swift & Company, places the number close to a million. George McCarthy says 500,000 will cover it. Court Kleman makes it about 750,000, based on a careful estimate of the Omaha agent of the Union Pacific. 'Bill' Smith says he will wager that there are less than a million. Charlie Buel, who has just returned from Nebraska, says that so many small feeders are in the business it is impossible to estimate with any degree of accuracy how many are on feed, but he figures about a million." The difference in the above estimates is so remarkable that the figures become useless. It is quite apparent, however, that more sheep are on feed this winter in the various States than ever before.

Reduced Rates to Southern & Western points via Michigan Central.

Settlers' and Homeseekers' Excursion Rates to many southern and western points on special dates during November and December are on sale at all Michigan Central ticket offices. For full particulars address J. S. HALL, Mich. Pass'r Agt. M. C. R. E., Detroit.

Petroleum Department.

CONDUCTED BY DR. W. C. FAIR.

Surfeit—Unhealthy Condition of Skin.—Fifteen yearling steers and heifers are affected with some new skin and blood disease. Comes in spots and patches on different parts of body. Has a dry scabby appearance, the hair falling off the affected parts. Is most noticeable around the eyes. Cannot see that animal is affected in the least as to health and appetite. E. J. B., Vermontville, Mich.—Give one dram Fowler's solution of arsenic three times a day to each animal. Apply a little kerosene once a day to scaly parts of skin and occasionally apply vaseline.

Bone Spavin—Abscess on Knee Joint.—Work horse six years old went lame a year ago in left hind leg. Hock joint is considerably swollen, supposed to be spavin, but of which kind am unable to determine. Have blistered; also used spavin' medicine to no purpose. 2. Fore knees of mare swelled and afterwards broke and discharged pus. She is not lame now, but leg is larger than it should be. V. H. T., Harbert, Mich.—Apply one part red iodide of mercury to four parts of lard once a week. Ointment should be well rubbed in and all around hock joint. Hair should be first clipped off close with scissors. Tie head up short for thirty-six hours after blister is applied. That will prevent him from biting the parts and making a scar. Do not apply any lard or animal fat to the parts, but use a good quality of vaseline or glycerine to soften the insensitive skin. 2. Apply tincture iodine to enlarged knee once a day until swelling is reduced.

Wound on Hind Leg—Roup.—Three-year-old mare was cut on front side of right hind leg across shank just below hock. Have tried different remedies without success. It looks as if there was proud flesh in it. 2. We have lost quite a few of our chickens. They stand around and act dumpish. Comb turns a light color. They seem to be well until one day before they die. When weather is cool they are better, but die in warmer weather. J. T. G., Meridian, Mich.—Burn proud flesh out of wound with a red hot iron until center is lower than the edges of skin, and apply Iodoform twice a day. 2. Apply one part Zenoleum to thirty parts of water to chickens' heads. Thoroughly spray your chicken coops with the same solution. Clean out coop thoroughly and burn all refuse and cleanings. I think if you will be thorough in disinfecting, you will not be troubled another season with the same disease. It would be well to add a little citrate of iron to their drinking water.

Thrush—Describe thrush and its causes.—Is it the same as foot rot in sheep or foul in cattle? Can horse be worked while being treated? Is thrush contagious? Had horse better be shod? If so, had I better use a bar shoe or an open one? Should horse be kept on ground or in barn? When is the best time to treat it? Would it do to put butter of antimony on affected part? A. B., Swartz Creek, Mich.—Thrush is the diseased condition of a horse's foot in the frog, caused by too much moisture and filth. One of the most common causes is allowing a horse to stand in wet barnyard, or to run loose in a stall that is not kept as clean as it should be. The best known remedy for such an affection is calomel and it should be applied twice a day after the unhealthy and ragged edges on the frog are cut away. The causes being dampness and filth, it is necessary to remove such causes. Keep animal in a dry, clean stable. It does no particular harm for a horse with thrush to be driven on muddy roads. One part carbolic acid to fifteen parts water is a very good remedy. Butter of antimony should not be used. It is altogether too active. Thrush in horses, foot rot in sheep and foul in cattle are different diseases. However, the same remedies that cure thrush will very often answer in the treatment of foot rot in sheep and foul in cattle.

The joints and muscles are so lubricated by Hood's Sarsaparilla that rheumatism is cured.

The advertisement of W. B. Eddy & Co. of Whitehall, N. Y., makes its appearance with this issue. They are the manufacturers of the justly celebrated Quinn's Ointment, a remedy for bunches on the legs of horses, such as puffs, wind galls, curbs, splints, spavin, etc. It is also used with much success treating grease heel, scratches and other eruptions peculiar to the fetlock of horses. It will generally be found on sale at the drug store or at the harness dealer's, but if you should not find it there write to the manufacturers direct who will be glad to attend to your wants promptly.

Farmers' Clubs.

CONDUCTED BY A. C. BIRD.

All correspondence for this department should be addressed to A. C. Bird, Highland, Mich.

OFFICERS OF THE STATE ASSOCIATION OF FARMERS' CLUBS.

President—J. T. Daniels, Union Home.
Vice-President—Patrick Hankerd, Henrietta.
Secretary-Treas.—F. D. Wells, Rochester.
Directors—G. L. Hoyt, Saline; L. H. Ives, Mason; W. H. Howlett, Dansville; C. J. Phelps, Damon; F. M. Whelan, North Newburg; A. L. Landon, Springport.

All communications relating to the organization of new clubs should be addressed to F. D. Wells, Rochester, Mich.

MISTAKES AND FAILURES.

It is designed to make The Michigan Farmer of January 1, a "Mistakes and Failures" special. We believe the idea a most practical one, and that great good will result therefrom. In accordance with this belief, we shall so plan the work of this department that in the issue of that date there will be room for fifty letters from loyal workers in our organization on the subject, "Mistakes and Failures in Club Work."

We especially ask every corresponding secretary, and every local member who has in mind any phase of local club work, of Association work or of editorial work in this department in which there has been a weakness manifested, or a mistake or a failure, to briefly mention it, and if possible suggest a remedy. Let these expressions be frank and honest, with the welfare of the farmers' club movement always in mind. Such expressions will be helpful to the local clubs, helpful to the Association, and helpful in the editorial work of this department.

And this remember: That these letters must be received by the editor of this department not later than Saturday, December 25. That they must be brief and to the point, not exceeding sixty words in length. Justice to all, demands the enforcement of these rules.

TAKE THE COLLEGE AS IT IS.

At the Grange meeting of the Detroit and Bay City Council, held at Orion on December 2, a member of the Order from Kent County took occasion to make a bitter attack upon the Michigan Agricultural College. He based his attack upon the statement that they had been guilty of using timothy hay for bedding for their stock on the College farm. Another man from another part of the State recently criticised the College for cross plowing a piece of heavily sodded ground the same week it was first plowed.

Our intense interest in the work of the College led us to make personal inquiry of the latter gentleman regarding the exact facts in the case. As a result we were not at all surprised to learn that he had not himself seen this example of unthrifty farming at the College, but that a friend of his had recently told him that one day in the summer of 1863 he—the friend—saw men cross plowing on the College farm under the above mentioned conditions.

We have taken the trouble to trace out many such rash and ill-considered statements regarding work at the College, only to find that as a general rule they were founded on rumors of what occurred a quarter of a century or so ago, the stories losing none of their sensationalism as they passed down the line of public criticism.

It is because of these facts that we ask, in simple justice to the College, that whenever such statements are made in public meetings or in private conversation, that some fair-minded man will take the trouble to sift the matter to the bottom and faithfully report the results, be such reports favorable to the College or otherwise. We gladly volunteer to assist every such honest investigation at any time.

But this we do insist: That the College should be judged by what it is doing now as one grand whole, and not by an idle rumor of some ill-considered or even foolish practice, which may, or may not, have been in operation in one department at some time during the forty years of its existence.

A FARMERS' RALLY.

EX-ASSOCIATION SECRETARY, B. F. PECKHAM.

We had what I shall call a "Farmers' Rally" in Parma last Friday, under the management of the Parma Farmers' Club. We invited the Concord, Spring Arbor and Sandstone clubs to meet with us and furnish a portion of the program and it was such a success that if only every two or three clubs in the State should hold such a meeting, I think it would be the means of causing a great many new clubs to be formed. We opened with 200 present and it steadily increased until over 400 were present at the evening session, many of them coming a long distance, some fifteen miles. And surely every one went home with an increased amount of interest and with the determination to take a more active part in club work. People will come to these meetings when they will not attend our local clubs, and those from a long distance will go home and help to form a club if none exists there.

With the fourteen in Jackson county at present and another to be organized this week, we claim to be the banner county, and can still find room where more should be organized.

Will not these one-day institutes under the State Board of Agriculture be a splendid chance to start clubs? Let every club that wishes to increase the number of clubs in their community hold a one-day "Rally" and I predict they will not be disappointed.

CLUB EXTENSION.

BY EX-PRESIDENT J. T. DANIELLS.
The Association question, "What is the best line of work for the Association to pursue during the coming year?" which was given out by the committee for discussion by the local clubs at their October meeting has shown a great unanimity of sentiment existing among the clubs as to the most proper and profitable work which should receive attention in the immediate future. The nearly 300 farmers' clubs already organized, and the many clubs being formed, have done—are doing—and are destined to continue to do, for the farmers and for their families a work, the intrinsic value of which it is not easy to estimate.

Consider for a few moments, if you will, the true and lasting worth of the mental, moral, social and financial benefits which have already been brought to those communities and to those homes in all parts of the State through the medium of farmers' clubs, and then tell whether it pays to take a little portion of time from toll and care and devote it to the improvement of the social and the higher attributes. There are some things which can be said of farmers' clubs and which will strongly commend them to favorable consideration, but which may not, perhaps, be said of any other organization:

First—They are inexpensive. In this respect they are truly leaders, exemplifying that which they advocate, a wise and judicious economy in administrative affairs.

Second—They hold open sessions openly and thus are relieved from that suspicion which inevitably will attach itself to that which is shrouded in secrecy, no matter how truly meritorious it may be.

Third—They are not restrictive as to occupation or calling of their membership, and thus they attract the favorable consideration and good-will of all.

Fourth—They are practical in their methods and work, being able to show a large percentage in results when the cost of same is considered, and this one feature alone should command the thoughtful attention of every practical man and woman in the State.

Fifth—Each local club is absolutely independent in its organization and methods, being entirely free to carry on its work as its members may deem best and without interference or dictation from any outside power whatever.

These are some of the many benefits which belong distinctively to farmers' club organizations.

The statement has been made and may be reiterated here: "There is room and work in the State for 1,000 farmers' clubs, and this without interfering with the proper work of any other organization. There should be at least one good, healthful, earnest and active club in every township, the beneficial influence from which should permeate all through those

communities, for the bettering of their conditions and for the building up of a nobler manhood and a happier womanhood.

The influence exerted during the legislative session of 1897 by the farmers' clubs, acting through their State Association, will not be forgotten, and affords proof abundant that the farmers can wield a potent influence when wisely organized and working together; and when the farmers shall be able to express their views and make known their wishes through proper, wise and conservative organizations, most beneficial results will surely follow along legislative lines.

And now a friendly, earnest word to you, brother farmer, you who do not see any good in a club or in organized effort. Are there any measures or laws which you feel should be enacted; or others which you think should be changed or annulled? Are there lacking any opportunities for mental growth or for social good in the conditions and circumstances surrounding you? Doubtless there are such, and now which is the best course for you to pursue, to stay by yourself and complain, or to join a farmers' club and work, work earnestly and wisely for yourself, for others and for the general good, along the lines above indicated?

Many of the local clubs have already appointed good committees for the organizing of clubs in unoccupied territory, and for the extending and strengthening of club work in general, and this is a move in the right direction. Let the coming year be the banner year for club work and for club extension in the State which leads in this work and which has the proud distinction of having formed the first State Association of Farmers' Clubs.

REPORTS FROM LOCAL CLUBS.

SOUTH JACKSON FARMERS' CLUB.
The November meeting was held at the home of Robert Tygh.

Mrs. S. A. Strong read an excellent paper upon "Is farm life conducive to intellectual development and to domestic happiness?" She eulogized the farm and said, in substance: I think it is. Farm life with its various duties is a valuable teacher. It brings us in close communion with nature and at the same time allows us leisure to become conversant with the arts and sciences. With good books and papers what should hinder intellectual development? The farmer can gain as practical a knowledge of his line of business as any man in any profession. Many of our eminent men and women have spent their youthful days upon the farm. Country homes may lack the polish, the veneer, but they are more or less the homes of culture and refinement, for culture is of the heart, a preference for higher thoughts and broader views. Certainly farm life is conducive to domestic happiness. In the country there is not that element of distrust and doubt that is often manifest in the city where vice is rampant and evil lurks at every street corner. There the gilded saloon, with its accompanying evils, is always near at hand. In the country these are replaced by pure air and sunshine, independence and leisure. Bryant says: "The farm home is no place to be gloomy and sad, When Mother Nature smiles around, E'en the deep blue heavens look glad, And gladness breathes from the blossoming ground."

Mr. Strong was called upon to give some advice to the delegates to the State Association meeting. He urged them to stand against class legislation, and not to humbly petition, pray, or implore that august body, the State Legislature, but to demand of it legislation in favor of the people. Also to convince it that the farmers have votes behind them.

Mr. Teft, of Spring Arbor, a visitor, was asked for further information upon the subject. He favors a more perfect organization of farmers' clubs and thinks it advisable to devise some means by which to lessen party spirit. He used to be a strong partisan himself, but has grown wiser and can now see that too many of us follow party regardless of principle. To-day politics rule the country, and class legislation delays prosperity. In the majority of clubs political discussions are barred. This is to be deplored. Farmers of to-day should lay aside party spirit and boldly discuss in the clubs the questions of the day, the questions of vital importance, not mere abstract theories.

Mr. Edwards summed up his counsel in three statements: First. Appoint committees to watch legislation and

report thereon. Second. See that good men are nominated for office. Third. Use all effort to secure a more perfect organization of farmers' clubs.

A motion was made and seconded that the delegates be instructed to act upon the counsel of Mr. Edwards. Motion prevailed.

Mr. Tygh has 68 hogs of which he is very proud. He has been experimenting with one. He fed it one week upon "smut-nosed" corn. It gained 18 pounds. The next week upon yellow dent. It gained 16 pounds. The third week upon white dent. It gained 11 pounds. Therefore he thinks "smut-nosed" the only corn on earth.

The next meeting will be at the home of Mr. and Mrs. C. A. Webster, Dec. 31. The annual election of officers and a paper upon the "Power of Habit," by John Neely, are the chief features of the program.

HELEN M. CARPENTER, Reporter.
Jackson Co.

OLIVE BRANCH FARMERS' CLUB.

The Nov. meeting was held at the home of Mr. and Mrs. Jos. Lowrey. The discussion of the day was upon the question: "Is the belief that we as a nation have entered upon an era of prosperity sustained by the facts?" D. M. Garner in opening answered the question negatively, claiming that the conditions that brought about the late financial panic had not been removed, reviewing the financial legislation since the time of Lincoln, charging the money power with seeking to prolong its reign, and instancing how farm property had depreciated since fifteen years ago. A number who followed in the discussion were in agreement with the opening speaker. Mr. Marion Jones took the opposite view, believing we are entering on an era of prosperity, and thinking it a good thing that people have had to learn economy and that they would not now be so ready to go into debt. Mrs. D. M. Garner would have no faith in any financial prosperity as long as conditions exist as they do, nor while politicians cringe to the liquor power and other iniquitous forces.

Mrs. Jas. Taylor thought we could not prosper as long as we do not recognize the Lord more than this nation does. Mr. Atkinson thought the indications point to better times and that now is a good time to invest in farming and farm property. Mr. Lee Wright did not think we have entered on an era of prosperity, because the former vicious causes remain, though the financial questions brought up by the opening speaker were not looked upon by him in the same way. To Mr. Jas. Taylor it seemed that times are better than they have been. Mr. R. K. Divine said that there has been no change of situation in financial measures—that the bankers want the government to furnish gold and they issue bills and then they will say: "Now, we have got you!" Rev. W. S. Buck said that as for permanent prosperity, the world had never had that yet, but as for such temporary prosperity as there had been in the past, we are entering upon it now; that panics were due to a loss of confidence, and general confidence is now being restored; that the evidence lies in the increased discharging of mortgages, in the lessened cry of destitution in the cities at the entering upon winter, in the larger number of people having employment, in the better prices and larger demand for products, and in the greater ease with which money may be got hold of. Mr. Lowrey said we entered upon an era of prosperity more than a year ago, or else the Farmers' Club could not have met with him at this time.

The next meeting is to be held at the Grange Hall in Clarkston.
Oakland Co.

BURTON FARMERS' CLUB.

This club is neither dead nor sleeping, neither has it been on a journey or taken a vacation. Through all the heated summer months the social and educational features have been kept up regularly, and the moral and financial questions have not been neglected. The Association topics have also been considered each in its turn, with the following results: One of the sons of the club has already entered the Agricultural College and a number of others are intending to take the same course at an early date. Through the influence of active members of our club one new club has been organized which will be known as the North Owosso club, and the indications are that another new club will soon be added to our ranks.

At the November meeting at the residence of L. S. Bowles the question "What is the object and why should we be interested in the organization of more farmers' clubs?" was given a

general talk, which brought out the following: By helping others, we help ourselves. The objects of farmers' clubs are for social intercourse, for moral, intellectual and financial advancement and to place farmers in a position to ask proper legislation from our lawmakers. This demands united effort. Increasing the number of clubs thus adds to our power.

At the December meeting with F. H. Rush, in the discussion of the Association topic, "Farmers' Institutes," it was decided that all the members of our club should attend the one-day institute at Bennington. Representative F. M. Shepard and F. H. Rush were elected delegates to the State Association with Miss Guilford and Miss Bertha Shepard as alternates. The delegates were instructed to introduce at the Association the subject of securing free delivery of mails in the rural districts, and to urge all local clubs to give their support in the matter.

At the next meeting of the club bulletins 146 and 147 from our State Experiment Station, entitled "Bacteriology and the Dairy" and "Pasteurization of Milk," will be reviewed and criticised. This meeting will be held with Geo. T. Mason,

S. GUILFORD, Cor. Sec'y.

Shiawassee Co.
EAST CAMBRIDGE AND WEST FRANKLIN FARMERS' CLUB.

This club met with Mr. and Mrs. W. Vanderpool Nov. 13. A large company intent on business filled the house. M. E. Case read an interesting article from The Michigan Farmer concerning the extension of Farmers' Clubs and emphasizing their usefulness. Chauncy Cooper: Trusts and combines are to be feared and avoided sometimes, but not such combines as the Farmers' Clubs.

In the discussion of "Traveling libraries" many thought it would be better for the farmers to own and manage a library by themselves. The question was referred to a committee and laid over to the next meeting.

Messrs. M. E. Case and C. Cooper were elected delegates to the State Association. J. Q. Osborn read from The Michigan Farmer a suggestive article on "Institute Work." The Farmer is rapidly gaining ground in the club owing to the interest taken by the paper in our work.

The club question, "Do we as farmers do all in our power to raise the standard of morals in our respective communities?" was opened by a paper by Mrs. L. W. German. She said: Farmers are too often careless in the choice of hired help, not taking into account the fact that their children must associate with them more or less. Evil habits are thus many times ineradicably fixed in our children. We are careful in our selection of the choicest seeds, plants and trees, but are too likely to neglect to exercise the same prudence in that "seed time" that comes but once in every life, allowing the obscene jest or the scandalous story to go unrebuked, and thus the poison enters the mind of the child and does its deadly work, and we wonder at the bitter results of our neglect. In the discussion which followed many valuable suggestions were made by Messrs. Vanderpool, Case, Dowling, Rogers, Daniels and Mrs. Carrie Rogers.

The delegates elected to the county meeting reported that a County Association had been formed, with Samuel White as president and Smith Munger, of Tecumseh, as secretary.

Lenawee Co. L. W. G., Cor. Sec.

CENTRAL FARMERS' CLUB.

At our last meeting held with Mr. and Mrs. H. J. Maurer, a paper was read by Miss Etta Mae Stoddard on "The Nineteenth Century," reviewing the progress the country has made and giving a glimpse of what may be expected in the future. "Many things have budded in this century that will bloom in the next." The restless American, with his disposition to rush and hurry, will demand the swiftest agents and electricity will be used, not only in the city, but upon the farm. Possibly the X-rays will be so perfected that the thoughts, desires and motives can be discovered as well as the action of the bodily organs. Deception will then be impossible and a great reform assured.

Hon. F. W. Redfern, ex-member of the legislature from Clinton county, was present and talked on "The Farmer in Legislation." He said: When the farmer finds himself imposed upon by taxation he has a right to find fault and should make his grievances and desires known. But do not scatter your ammunition. Agree upon two or three things and then assist your rep-

resentative to push them. All laws are compromise measures. I believe the farmers' clubs are a power in legislation, and may be more so by more united action and more definite demands.

Hon. A. L. Bemis, representative from Montcalm county, was also present and gave a talk on the new school laws. He described how the original bill for the uniformity of text books was abridged, amended and remodeled to suit the demands of publishers and others, until the bill as finally passed bore little resemblance to the original. He believes it is not a good measure from an educational point of view, but said its financial features recommended it. Mr. Bemis stated that at no time was he approached for the purchase of his vote, nor did he see anything of the kind. Mr. Redfern, however, thought money exerted considerable influence with some members.

Some discussion arose as to Gov. Pingree's plan of railroad taxation. All agreed that railroads should be taxed the same as other property, but disagreed in favoring the result of giving to the cities the bulk of the tax, and depriving the country which furnishes the bulk of the freight.

Resolutions of respect for Walter A. Floate, deceased, were adopted and ordered spread upon the records of the club.

Mr. Frank Bolander and Mrs. E. C. Read were elected delegates to the State Association. Adjourned to meet with Mr. and Mrs. Brayton Read on December 8.

Ionia Co. D. G. LOCKE, Cor. Sec'y.

PROGRESS FARMERS' CLUB.

With words of good cheer President Pierce called the Progress Club to order Dec. 1st, at the home of Mr. and Mrs. M. J. Rice.

The discussion "Do plants and flowers have an influence on the inmates of the home?" was opened by Mrs. D. Case, who thinks they have an influence on children. Where there are children there should be flowers. Some thought they should not occupy the pleasantest window in the house. Others said, let the wife put them where she pleases. C. M. Pierce thinks them healthful. Topic, "What we have learned the past year," presented by J. E. Lewis. Push, pluck and perseverance have accomplished wonders.

In a paper by Mrs. D. Case on "Some of the trials of being a woman," the men thought all the trials must be enumerated. Miss Procter's paper on "How to Spend our Evenings" was discussed with much interest. More careful reading, more music and more sociability were recommended.

A meeting was appointed at Mr. Wing's January 27th to elect officers for the Millington Club. Progress Club meets with Mr. and Mrs. Albert Whitehead January 5th. In our last report it was erroneously stated that this club was in favor of moving the county institute from place to place. Progress club is opposed to moving the institution from place to place.

Tuscola Co. F. A. BRADLEY, Sec'y.

ESSEX FARMERS' CLUB.

The club held its November meeting with Mr. and Mrs. C. E. Bills. Since our last meeting one of our most active members, Walter Floate, has been called from us by death. A committee was appointed to draft resolutions expressive of the loss which the club has sustained.

Mrs. C. D. Rice read a paper on "Housecleaning," in which the useful side of this solemn subject was presented for consideration. In the discussion it was regarded as being one of those necessary evils which obstruct the peaceful, onward flow of family affairs.

The question box brought out an expression of opinion on the relative value of steaming and soaking food for fattening hogs. Steaming was given the preference when not attended with too much expense.

J. C. Jewett and Mrs. J. T. Daniells were elected delegates to the State Association. Messrs. J. Price, J. C. Jewett and J. T. Daniells were appointed to aid in the formation of new clubs and increase the efficiency of club work.

A paper by Mrs. J. T. Daniells on the "Ottoman Empire" brought out in the discussion the statement that Gladstone condemns England for permitting Turkey to exist. That 100,000 Americans were massacred in a single year. That Turkey can well be spared from the geography. That the time will surely come when the strong will cease to oppress the weak.

The Association question brought out the following: M. S. Moss: The

club has done good work during the past year. Good seed has been sown, which will certainly bear fruit. One of the best results is the strong friendship formed among the members. Mrs. M. S. Moss: The recent death of a faithful member should impress us of the importance of doing our best while the opportunity is ours. Mrs. J. T. Daniells: If the work is not properly done the responsibility is ours. A. Mathews: The clubs through the State Association have already saved the taxpayers a goodly sum. Five new members joined the club.

Clinton Co. J. T. DANIELLS, Cor. Sec.

PINE RIVER FARMERS' CLUB.

December meeting held with Mr. and Mrs. Frank Frear. A profitable hour was spent over the question box, after which two delegates were elected to the State Association.

In a paper on "Thanksgiving" President Abbott suggested many things which we have to be thankful for, chief among these being the growth and prosperity of our club. Mr. Everden, of St. Louis, in a splendid talk, brought out the idea that there is no grander or more noble profession than farming. If we are not what we ought to be, we alone are to blame. In January we meet with Mrs. Van derbeck.

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Newport P. O., R. I., June 18th, 1897.

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Miscellaneous.

THE NORTH WALK MYSTERY.

BY WILL N. HARREN.

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CHAPTER I

Miss Hastings awoke with a start. She found herself trembling. She had an idea that some unusual sound had roused her. She sat up in bed to listen. Then she heard a voice. It was old Mr. Benton in his room adjoining hers. He was speaking in a loud, angry tone.

Miss Hastings rose, thrust her feet into slippers and put on a wrapper. She was vaguely frightened and yet hardly knew why she should be so. She turned up the gas, which had been burning low, and approached the partition between her room and the old man's. Now she could hear more distinctly. Mr. Benton seemed to be angrily upbraiding some one. Miss Hastings opened the door leading into the corridor, and the voice of the old man became more distinct. "You are no child of mine from this day forth," she heard him cry. "I shall disown you to-morrow! Get out of my sight! To think that you—"

The door of Mr. Benton's room was suddenly slammed, and Miss Hastings shrank from the crack through which she had been peering. Then she heard footsteps pass her door and descend the front stairs.

Miss Hastings sat down at her table, took up a book and tried to read, but found herself turning page after page without recalling a word she had read. She could hear the heavy tread of the old man as he walked to and fro in his room. What had happened? What was about to happen? What had been going on all that week between her friend Alice Benton and her father? The old man had treated Arthur Montcastle, a guest like himself, very rudely and had since been taking his meals in his own room to avoid meeting him. Besides this he had quarreled constantly with Alice and his son Ralph about trifles ever since Miss Hastings arrived, a week before. It had made her feel very uncomfortable, and she would have gone home but for her sympathy for Alice and the fact that Ralph had asked her to remain longer.

Old Benton's walk had ended. Miss Hastings hoped he had gone to bed, but just as she was about to undress herself she heard his step and the rattling of his doorknob. He was leaving his room. Miss Hastings again peered cautiously into the corridor. She saw the old man, dressed as he had been all day, go into the laboratory which adjoined his room on the other side. Looking out on the lawn below, she saw a bright light streaming from the window of the laboratory and knew that he had lighted the powerful electric lamp which hung in the center of the room. Now and then she saw his gigantic shadow on the lawn as he moved about. What could he be doing there at such a late hour? She looked at her watch. It had run down and stopped at 11, but she thought it was at least two hours later than that. Suddenly the light left the lawn. Then she heard Mr. Benton close the door of the laboratory and descend the back stairs leading to the garden.

Miss Hastings decided to go to bed. She was angry with herself for being so unreasonably nervous. She had unbuttoned her wrapper when—

"Crack!"

It was a loud, clear report like that of a revolver.

Miss Hastings' blood ran cold. She conquered an impulse to scream, deliberated a moment as she stood quivering in the center of the room, then jerked the old fashioned bell pull. One minute, two, three, ten minutes passed. No one came to answer her ring, and there was nothing to indicate that the report had roused any one else in the house.

Miss Hastings did not want to run the risk of making herself appear ridiculous in the eyes of the rest of the house party, so she began to try to persuade herself that the report was made by some explosive with which old Benton was experimenting. What could be more natural, since he was given to such things and had

just left his laboratory? She sat down and tried to calm herself by using her will power.

Half an hour passed. It expanded slowly into an hour, and yet Mr. Benton had not returned to his room. Miss Hastings' fears were now increasing tenfold. She was sure she had done wrong in not rousing the house at first. She drew the silken bellcord to the floor several times. Then, getting no response, she decided to wake some one. Mr. Stanwood, a guest of the house, roomed across the corridor. She went to his door and rapped.

She knew he was sleeping soundly, for it was several minutes before she heard him rise. He opened the door slightly.

"Who is it?" he asked.

"It's I, Mr. Stanwood—Miss Hastings," she explained apologetically. "I—I heard a loud report in the garden about an hour ago. It sounded like a revolver, and as Mr. Benton—Mr. Jacob Benton—went out about that time and has not returned I was afraid something might have happened to him, some burglar or—"

"Oh, I presume not!" said the young man lightly. "It may have been some one shooting at cats. They have been very noisy in the neighborhood lately."

"I—I don't think it was that," said the young lady, "and really I am so nervous that I should be very grateful if you would get up and see about it. I have rung several times, but the servants seem not to have heard."

"Oh, certainly!" exclaimed Stanwood. "I'll be ready in a minute."

She was waiting for him, her head enveloped in a shawl, when he emerged.

"I believe I'll go down stairs with you," she said. "The others must be up, for I think I heard voices outside. I don't like to be left alone up here."

"You are nervous," replied Stanwood. "Come on, then, we'll soon clear it up."

She followed him down the carpeted stairs into the large, dark hall below. He turned on the electric light. No one was in the library or the adjoining drawing room, but low voices were heard outside. Passing through the sitting room, which lay beyond the drawing room toward the rear, they met Mr. Montcastle and Miss Alice Benton entering at a door that opened on to a side veranda. Both of them were dressed as if they were prepared for a journey.

"Hello," cried Stanwood. "What's the trouble outside?"

"Trouble?" echoed Montcastle. "I—I don't know. What do you mean? The fact is, Miss Benton and I—"

His words failed him. He fumbled with the buttons of his ulster and stared at them through the semi-darkness. Miss Benton leaned on his arm, put her handkerchief to her face and was silent.

"The report of the revolver, or explosion, or whatever it was, in the garden," said Stanwood. "Didn't you hear it?"

"No," cried Alice, uncovering her face. "What—who heard it?"

"I did," answered Miss Hastings. "It must have been an hour ago. It sounded as if it came from the garden down toward the north walk."

"It may have been nothing worth bothering about," said Stanwood. "Montcastle and I will go down and look around if you will remain here."

For a moment no one spoke as they all followed Stanwood out into the yard through the door by which Montcastle and Miss Benton had just entered.

"Come on, Montcastle," proposed Stanwood. "We might as well investigate and have done with it."

"Oh, no; don't leave us!" cried Miss Benton, leaning on Miss Hastings. "I am afraid I am going to faint. Something has happened."

A window sash was raised in Ralph Benton's room up stairs, and he looked out.

"What's the matter down there?" he asked.

"Oh, brother, something must have happened in the garden!" replied Miss Benton. "Agnes heard the report of a revolver."

"Agnes—Miss Hastings must have made a mistake," said the young man slowly. "When did you hear it?"

"About an hour ago," replied Miss Hastings. She was wondering why his voice sounded so strange to her.

"Wake papa," Alice Benton called up to him, "and come down. The gentlemen are going to search the grounds. Oh, I wish we didn't live so far out! I haven't seen a policeman near here in a month."

The window sash fell with a crash. Ralph Benton had disappeared.

"Your father," Miss Hastings explained to her friend, "went down the back stairs just before I heard the report. He has not returned, and that is the reason I became so anxious."

"About an hour ago, did you say?" asked Alice Benton.

"I think it was about that time."

Miss Benton looked at Montcastle.

"Did you see him?" she asked. "I thought perhaps—"

"The governor is not in his room or in the laboratory," Ralph interrupted as he came across the veranda. He wore a light overcoat with upturned collar, and the rest of his attire bore evidence of his having hastily dressed.

"Miss Hastings thinks the report came from the direction of the north walk," said Stanwood. "It is no use looking elsewhere just now. Come on, Benton. Leave Montcastle with the ladies."

The last words came from the speaker after he had disappeared in the shrubbery among the shadows of the tall trees.

Ralph made a step or two in the same direction. Then he seemed to change his mind and instead walked down to the fountain in the center of the grounds. Miss Hastings, who was looking at him wonderingly, saw him rest his hands on the edge of the basin and look down into the water. Presently he stood erect, turned and slowly came back toward them. Just then they heard a startled whistle from Stanwood.

Ralph paused while yet several yards from the others.

"He must have made a discovery of some sort," he said. "I say, Stanwood, wh-what's the matter?"

Miss Hastings noticed that his voice seemed to break when he raised it in calling to Stanwood.

"Gentlemen, I think you had better come down here," came in a guarded tone from the searcher.

"Oh, no! Don't leave us!" cried Alice Benton. "I cannot bear it."

"What is it, Stanwood?" asked Ralph. "The ladies refuse to be left alone."

Stanwood came out of the shrubbery.

"Something awful has happened," he said, looking at Miss Benton. "Be prepared—"

"Father!" gasped Miss Benton.

Stanwood hesitated and glanced questioningly at Ralph.

"Out with it," said Ralph, turning his face toward the house.

"I found your father," said Stanwood. "He has been murdered."

"Are you sure it was he?" asked Ralph.

"Quite sure. He is lying under the large oak in the middle of the north walk."

"I don't believe it," said Montcastle. "I shall go and see."

"Hold on!" The command came from Ralph. "I presume Stanwood knows what he is talking about. We must be careful and not do anything which would stand in the way of police investigations. Many a valuable clew has been lost by too many people being on the spot before detectives arrive. We will notify the authorities at once. He'll have to lie where he is till—"

"Oh, brother," protested Miss Benton, "can't you have him brought into the house?"

"He is quite right," Montcastle put in. "If your father is dead, it would not help matters to move him. You ladies ought to go in."

"Oh," cried Alice, "I cannot bear to think of it, and you and I—"

"Hush!" interrupted Montcastle in a cautious whisper. "Remember your promise." He drew her arm into his and started toward the house. The whispered warning escaped Miss Hastings, for Ralph was telling Stanwood what ought to be done. Stanwood agreed to stand guard at the end of the north walk, while Ralph escorted Miss Hastings to the house and informed the police.

"You see," Ralph explained, "I want the thing sifted to the bottom in the best possible way. I—I want to know who did it and bring the criminal to justice. Am I not right, Stanwood?"

"Quite," returned Stanwood. "I presume you will employ Minard Hendricks. He is wonderful. Nothing escapes him."

"Ralph hesitated. Miss Hastings saw a strange expression cross his pale face.

"I—I don't know," he stammered. "Of course—well, I presume the police will know if it is necessary."

"I should have Hendricks by all means," Stanwood advised. "I see by the papers that he is in the city. He is undoubtedly the finest detective in America."

Ralph gave his arm to Miss Hastings. "All right," said he, "if the police think it necessary. I—I don't want anything left undone."

CHAPTER II

At 3 o'clock that morning Minard Hendricks, the detective, called at the apartments of his friend, Dr. Lampkin, the hypnotic physician. He roused the janitor and went hastily up to his friend's bedroom.

"Wake up, old man!" he called out as he rapped loudly.

The doctor opened the door and looked into the dimly lighted corridor.

"Oh, it's you, eh? What's up? Is the house afire?"

"You are funny when you are only half asleep," Hendricks jested. "Let me in. We mustn't wake the entire block. You were yelling at the top of your lungs."

"Was I? Your loud rapping made me think the building was tumbling down."

Hendricks entered and closed the door after him.

"Why, it must be—what time is it?" asked the doctor, fumbling among the bric-a-brac on the mantelpiece for a match.

"Three o'clock," answered the detective. "Put on your clothes. I want your assistance again."

"What's up?"

"Another murder."

"Where?"

"East Orange, N. J. It's only half an hour from here. I want to catch the first train on the other side: boat leaves pretty soon."

Dr. Lampkin began dressing hurriedly.

"Who's the victim?"

"Old Jacob Benton, a wealthy inventor. You've seen his name mentioned in connection with electric experiments and photographic improvements. That's all I know about him. My information was in the shape of a telegram from the chief of police over there. I understand Benton was having a sort of house party, and there will be a good many people to take in all at once. You have helped me often with your impressions of character. I seem to be lacking in that sort of judgment. What I get is always through external evidence."

"Bosh! I can't help you in the least."

"Get into your duds," said Hendricks. "I have no time to argue with you. If it hadn't been for you hypnotizing Whidby in the Strong murder case, I never would have got on to the track of Farleigh. You are too modest, my friend. You are a gold mine."

Dr. Lampkin darted into a curtained alcove and presently appeared fully dressed.

"I'm ready," he said. "I'd rather watch you unravel a skein of tangled circumstances than to hypnotize millionaires at a fortune sitting, and if I can help send your euphonious name on down to posterity and up to prosperity as a great and shi—"

"Let up!" Hendricks cautioned as he took hold of the door latch. "Don't let the entire building know we are out after game. We might be troubled with a score of reporters over there."

They succeeded in catching the desired boat and train and in half an hour were approaching the Benton homestead in the outskirts of East Orange. It was a great, two storied brick building, with a gothic roof and an L. In front was a wide, well kept lawn, and behind stretched quite an extensive piece of woodland.

Hendricks waved his hand toward the rear.

"A good, bang up place for a killing," he said, as if talking to himself.

"It happened outside of the house, then?" said Lampkin.

"So my telegram tells me, and back there."

The gray of early morning was just beginning to show a suggestion of yellow. The dew upon the grass looked hard and white like frost. From the street the two men could see that the front part of the house was lighted. They had reached a small gate opening into the central walk, that led to the front door, and Lampkin put out his hand to open it.

(To be continued.)

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THE EDITOR'S DAIRY NOTES.

CONCERNING OLEOMARGARINE LAW.
A reader wishes to know why the Dairy and Food Commissioner does not prosecute the offenders in Detroit and elsewhere, and thinks he is "rather slow." "Did some Detroit justice refuse to entertain the commissioner's complaint against a dealer? How was it settled?" Other questions are asked also, not pertinent to the one topic under consideration.

The commissioner is hunting up offenders constantly, and already has many suits on hand. These he is prosecuting as fast as the courts can handle them.

As to the Detroit police justice, he refused to entertain a written complaint from Commissioner Grosvenor, charging a dealer with selling an imitation of butter colored in the semblance of yellow butter, which is now strictly in violation of the law of Michigan.

The justice took unwarranted grounds in the matter, refusing to receive the complaint. The commissioner applied to the Wayne Circuit Court in the matter and the judge delivered a decision granting the mandamus prayed for.

The court gave very cogent reasons in his clear and very thorough opinion, and showed that the police justice's reasons were entirely untenable. His opinion will be very interesting to all our dairy readers who make and sell genuine butter, and we give it herewith. Judge McMahon said:

This is a case of great public interest. and I regret exceedingly that I lacked time and opportunity to spend several days upon it. In his answer to the petition for a mandamus, Justice Sellers gives several reasons for his refusal to entertain such complaints. One of these is that the complaint in question was not made by the commissioner himself, as required by law. Another is that the act is unconstitutional, because it embraces more than one object, and, still another, that the act is class legislation.

The intent of the act was to prevent deception and fraud in the manufacture and sale of imitation butter. Justice Sellers holds that all such complaints must be made by the commissioner in person. This opinion is evidently derived from another legislative act, fixing the duties of the commissioner. The act we are considering nowhere indicates that complaints can be made by no one else. Without express legislation to prevent it, every citizen can exercise the fundamental right to make complaints against public evils. It is doubtful if even the legislature can take away this right. It is not claimed that ordinary citizens cannot make complaint for violations of the liquor laws. The dairy and food commissioner has a very wide territory to look after, and it would be an impossibility for him personally to cover it all.

As to the contention that the act is unconstitutional, I cannot appreciate the force of the objection, because I have been unable to find that it embraces more than one object. That object is plainly to prevent fraud and deception in the sale of imitation butter.

The same is true as to the contention that the complaint did not charge that the article sold looked like imitation yellow butter. I have been unable to find that the act requires the insertion of any such charge in complaints.

The contention that the act is class legislation is somewhat ambiguous. It is not the province of the courts to criticize legislatures. Their occupation of their own field is exclusive. Courts cannot legislate. If they pass acts that are regarded as oppressive, courts have nothing whatever to do with it. There is no doubt that legislatures should not oppress any legitimate business, that they should not pass acts to help butter producers to the injury of the manufacturers of other pure foods, and that the act we are considering does not do that. It was framed for the sole purpose of preventing deception and fraud. This the state has a perfect right to do. It has been so decided many times by the courts, and is so well established as to be beyond controversy.

The Supreme Courts of Massachusetts and the United States have passed on an act precisely like the one under consideration, even to punctuation, declaring it to be constitutional. Their opinions should carry more weight than those of a police justice, or of this court. There is no question that the state has a perfect right to prevent deception in food products, even though they may be wholesale. There are many people who would not buy or use oleomargarine, or imitation butter, under any circumstances, if they knew it, and they have a right to protection. If some one is accidentally injured in enforcing this act for the general good, there is no redress. Some burdens may be imposed, but it is in the exercise of a large state policy, and they must be borne.

Evidently the manufacturers of and dealers in butter substitutes have their friends among the legal fraternity who will use every effort to uphold them in their unrighteous work of palming

off butter substitutes for what they are not—genuine butter.

The fight is now on, and every dairyman should encourage and urge Commissioner Grosvenor in his work of ferreting out and prosecuting offenders of the oleomargarine law. Write the commissioner a letter of encouragement. It will do both the writer and recipient much good.

COWS AND FEEDS.

"Inquirer" asks: (1) What is the comparative value of gluten meal for growing stock? Have heard that it is deficient in mineral elements.

(2) Oats have been named as the greatest milk-producing food. Is it so?

(3) What do you think of Ayrshires for the dairy? They are recommended to me as the best. They are high-lifted and will live where a Jersey will die.

(4) If a calf has sour apples before it constantly, will it eat so many that it will become poor and unthrifty? A heifer calf in an orchard last year did not thrive and it was laid to the apples.

(5) If a calf is to be raised on skim-milk, when should it be weaned?

(6) What is the value of hay, per ton, when fed to dairy cows for butter?

(1) The following table gives the per cent of digestible nutrients and feed value per ton of gluten meal and four of the principal high-grade feed-stuffs, also timothy and clover hay:

| | Protein. | Nitrogen free extract. | Fat. | Feed value per ton. |
|--------------------|----------|------------------------|------|---------------------|
| Gluten meal | 25.5 | 42 | 10.4 | \$23.04 |
| Corn meal | 7 | 63.2 | 3.3 | 16.98 |
| Oats | 9.3 | 52 | 4.2 | 16.72 |
| Cottonseed meal | 3.7 | 15 | 12.6 | 23.22 |
| O. P. Linseed meal | 28 | 27.6 | 7.1 | 20.90 |
| Timothy hay | 2.9 | 28.4 | 1.4 | 10.48 |
| Clover hay | 6.6 | 23.2 | 1.7 | 11.20 |

A careful study of the table will show that gluten meal has great feed value. Its high per cent of both protein and nitrogen extract place it in the front rank of feeding stuffs. Whether it is an economical feed, depends upon the relative price of it and the different feeds.

(2) A good milk-producing food is one that is rich in protein. Reference to the table shows that oats are deficient in protein, but rich in nitrogen, hence would be better for growing animals than for milk cows. Gluten, linseed and cottonseed meal, each contain about three times as much protein as oats, and either would be a better milk-producing food.

(3) The Ayrshires are a good dairy breed, yielding a large quantity of milk. The claim is made for them that they will give a larger return of milk for the feed consumed than a cow of any other breed. While this may be true, it does not prove that they would be the most profitable where butter is the object. They would undoubtedly be the ideal cow for a dairy where selling milk was the object.

There are few breeds that equal the Jersey in the production of butter, when quantity and quality are considered. Perhaps the Ayrshires are very hardy, and would "live where a Jersey would die," but the latter might be the most desirable cow after all. Whoever expects to make a success of dairying must remember that a good, well-bred dairy cow is a somewhat delicate animal and needs careful attention and handling to be made profitable. They will not stand the same rough, indifferent treatment that beef cattle are often subjected to, and do well.

(4) It is quite probable that some apples when eaten in considerable quantities would tend to produce unthriftness, on account of the acid contained in them. Sweet apples in moderate quantities are generally considered a fairly good feed. They are certainly more valuable than sour ones. To depend upon apples entirely, even though they were sweet, would not be good policy. A growing animal needs something more nutritious and substantial.

(5) The best way to raise a calf is not to let it suck the cow at all, but milk its dam and feed it at once. The milk of another cow can not be substituted for it while the calf is young. The milk of a fresh cow contains more albumen than the milk from the same cow later on. It is nature's special preparation for the young calf. When taken from the cow at once, it is much easier to teach it to drink, and the cow will not worry for it, and not be near so apt to learn to kick while being milked.

Many young cows are spoiled by

leaving the calf with them a few days or a week, perhaps, as some do. The calf should be fed on whole milk a week or ten days, and then gradually taught to drink skim-milk, by substituting a little for the whole milk, and increasing the quantity of skim-milk until at the end of a few weeks or a month it is fed all skim-milk. In this way the growth of the calf will not be checked. If the skim-milk is plenty it can be fed until the calf is 5 or 6 months old; the longer the better.

(6) That depends very much on the kind of hay, and the kind of cows that eat it, and not a little on when and how the cows are kept. A good dairy cow in a warm stable in winter would probably pay \$10 or \$12 per ton for good clover hay, while a scrub cow that had to "hustle" around a straw-stack all the time, would probably not pay over half as much. A reference to the above table shows that clover is a well balanced ration, and every observing dairyman knows that it has few superiors for milk production, and if good for milk, is good for butter also if fed to the right breed of cows. Timothy hay contains much less protein, also less fat. It is more valuable as feed for driving horses. A farmer who keeps cows for milk can afford to sell timothy hay, invest the money in bran for the cows, and make money by it.

Stark Co., O.

O. J. VINE.

PROFITS OF CREAM DAIRYING.

Mrs. M. A. W., of Geneva, O., makes some inquiries concerning my report of the institute at Cuyahoga Falls upon the "Profits of Cream Dairying." She says in brief: "Mr. J. T. Newton, of Hudson, claims to have sold \$1,400 worth of cream to one milk vendor in the markets of Cleveland, that was the product of 20 Jersey cows. Will he please state how much he received per gallon for the cream, and whether it was shipped once or twice a day in summer? Please indicate whether it was separator cream or raised by the deep setting process?"

Mr. Newton in reply says briefly: "For the year ending April 1, 1897, we obtained 45 cents per gallon in summer and 50 cents in winter. We shipped our cream once a day, thoroughly cooled and held in ice water. Yes, we use a separator, which we consider a necessity in making either cream or butter."

As to the relative profit of selling milk or cream, Mr. Newton adds: "That depends entirely upon the value realized from the skim-milk as food for calves and pigs. We value the offal of a cream dairy much higher than farmers generally do. However, you will receive more money directly by selling the milk even at an average net price of 8 cents per gallon in winter and 6 cents in summer."

Mr. Newton adds that the conditions that prevailed last year have greatly changed, and the dairymen of northern Ohio are not prospering in this year of grace. The larger firms that are engaged in the manufacture of cream goods have swallowed up the lesser, and the creameries and factories by cutting the prices have practical control of the trade. The prices—because of competition—have been reduced below the cost of production unless dairymen can utilize their skim-milk to good advantage. He says: "We have abandoned the business and sold a large number of our cows, and are again making butter and raising calves and pigs. Dairying in northern Ohio is a slave's life at best and I am going to try to make an honest living by going back to my first love, viz., Shropshire sheep. I have sufficient confidence in the future to winter 50 Shropshire rams for next season's trade. Our crops have been very good, far above the average throughout the state. My 15 acres of wheat yielded a total of 683 bushels—not including the raking—or an average of over 45 bushels per acre. Hay and Hungarian grass were as heavy as they could grow upon the ground, and corn and silage were A No. 1."

This bit of experience by a fairly successful dairyman will throw a flood

of light upon the present condition of the dairy business in northern Ohio.

A. T. MCKELVEY.
(When we can sell cream for 50 cents per gallon the year around, we consider it greater profit, for amount of work involved, than to sell butter at 30 cents per pound.)

In this section there is much competition, but cream is still sold for even 60 cents per gallon, in some of the city restaurants and ice cream parlors.

To be sure, dairying is confining business, but so is any business in the city that pays. The greater the attention paid to details in dairying by an ambitious dairyman, the greater the profit.—Ed.)

When writing advertisers Mention Mich. Farmer

Anything in the line of economy appeals to the farmer, and an article that can be used for a hundred different purposes ought to be investigated.

That article seems to be Neponset Waterproof Red Rope Fabric, which can be used for covering roofs, sides, and walls of houses, barns, hen-houses, green-houses, hotbeds, haystacks, wagon covers, etc. It is water-proof, wind-proof, and frost-proof. It takes the place of back plaster in dwelling-houses and clapboards and shingles on outhouses; insures warmth and dryness wherever used, and is inexpensive.

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Full particulars and samples free. Write F. W. Bird & Son, East Walpole, Mass. For sale by Dealers in Hardware, Lumber, and Building Supplies.

DAIRY DANGERS

A little cheap, impure, plaster-filled salt will spoil a valuable lot of butter. Flavor, endurance, grain and weight are gained by using Diamond Crystal Salt. **The Salt That's All Salt.** Send for the book.

Diamond Crystal Salt Co., St. Clair, Mich.

A Sharples Farm Separator

will improve the quality of your butter a greater degree than will any other appliance you can place in your dairy. It will likewise increase the quantity of your butter, and the proceeds from your whole milk will be doubled. Therefore consult your own interests by using a Sharples Farm Separator.

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Chicago Housewrecking Co., 55th and Iron Streets, Chicago.

There is no work on the farm that pays better for thoughtful management. You may have had much experience in the feeding, breeding and management of a dairy. Your knowledge and experience would be worth much to others, and it must be true that others have knowledge and experience that can be worth much to you. If you are interested in your own success and desire to manage your cows so that they bring you the largest possible return, make up your mind now to subscribe for HOARD'S DAIRYMAN. It puts you in touch with the most successful dairymen in the United States. What these practical men know and their experiences you will find in HOARD'S DAIRYMAN and it makes a 20-page weekly that costs the reader but \$1.00 to January 1st, 1899. If taken in connection with THE FARMER both papers can be secured to January 1st, 1899, at the low price of \$1.65.

is in every sense of the word a journal for the farmer who desires to make a profit from his cows. It handles the raising of the crops to the delivery of the product. It is the leading dairy journal published in the English language.

THINK OF THE COWS

HOARD'S DAIRYMAN

dies this part o' the farm work thoroughly, from the raising of the crops to the delivery of the product. It is the leading dairy journal published in the English language.

THE MICHIGAN FARMER

—AND—

State Journal of Agriculture.

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No deviation from above rates.

DETROIT, SATURDAY, DEC. 18, 1897.

This paper is entered at the Detroit Postoffice as second class matter.

Mr. Smith, the Kent county dairyman, gives a few more pointers this week on the sale of butter substitutes in Grand Rapids and their use in hotels and restaurants as butter. His ideas regarding the business are entirely correct. The coloring of such articles to resemble butter should be summarily stopped as a fraud prohibited by law. What our correspondent says about the butter made and sold in this State is, unfortunately, too true. Much of it is unfit for food, and is produced amid surroundings which, if known to consumers, would prevent its ever finding a purchaser. If those who can only make such a grade of butter would turn their attention to something else it would be a grand thing for the dairy industry of the State. If they cannot do this, let them at least clean up their dairy-room and stables, supply their cows with good food and pure water, and try if they cannot make decent butter which will bring a fair price.

A dispatch from Berlin announces that the German government has just completed a report on American meats seized during the six months from January to July, because of its being affected with trichina. Extracts from this report furnished to the American minister at Berlin, Mr. Andrew D. White, are reported to show an enormous increase in American trichinous meat cases, notably at Stettin, Cologne, Breslau, Essen, Aix-la-Chapelle, Dusseldorf, Bochum and Guben. However, while a certain percentage of cases are really of American origin, the fact is palpable that the whole report is bungled and many of the cases quoted are not proved to be of American origin. At Mr. White's formal request, he was furnished with the registry number of the original package and other marks of identification in order to enable him to acquaint the officials at Washington with the facts in the case and secure the punishment of negligent meat inspectors in the United States. A fact which has been very generally neglected is that trichinosis is prevalent in a number of districts of Germany at present. A curious case was that of a wild boar, shot in the woods and offered for sale in Berlin, which was found to be horribly trichinous. Of course this report, no matter how unjust it may be, will be seized

upon by agrarians in the German legislature as a pretext for entirely excluding American meats from that country. It is a singular state of affairs when Americans, who use their own meats exclusively, are never affected with trichina, while Germans, who use but little of it, are claiming to be suffering with this disease. The story sounds very fishy.

THE SPECULATIVE MOVEMENT IN WHEAT.

The success of the speculators on the bull side in Chicago in pushing up the price of the December option, and thereby squeezing those who had sold short unmercifully, cannot, in the nature of things, have any permanent effect upon wheat values. The movement was undoubtedly greatly helped by the fact that prices were really below the range which should have ruled in view of the position of wheat in the world's markets. It is probable those who engineered the advance first depressed values to the lowest point possible, that their profits might be greater under the advance they proposed to bring about.

It is now said that the contest is between the bulls led by Mr. Leiter, a man with practically unlimited capital at his command, and Mr. P. D. Armour and his friends, who are equally well supplied with the sinews of war. The outcome of a contest between the two parties will be watched with interest. It looks as if the bulls have the December option cornered, and intend to hold this advantage by taking all the contract wheat offering and shipping it out at once. Thus we notice that Liverpool announces that she is expecting 5,000,000 bushels of Chicago contract wheat. Prices have dropped considerably on December wheat since Thursday last, but that does not prove that the Leiter clique has lost its hold on the market. On the contrary, it looks as if the decline is a part of their program, as it will stop the heavy shipments of wheat from many sections of the country as the result of the inflation of prices in Chicago. The Leiter people must take all the wheat of contract grade offering, and they can do this better by allowing values to decline. If they can do this, weak holders, men who have little means and cannot afford to keep their margins good, will be squeezed out, and whatever profits come from the deal will go into fewer hands. Then towards the close of the month, when the shorts must settle, there will be a wild time, and hundreds will be squeezed so hard that the Chicago board will know them no more.

It will be a battle of giants, in which the little fellows will be most badly damaged. As between the two cliques, we favor Mr. Leiter winning, simply because his success means higher prices for wheat, and he will thus do some good. But as a matter of public morals we believe the whole lot should be indicted as gamblers, whose methods are contrary to public policy, and a disgrace to a law-abiding people.

I. H. Butterfield, secretary of the State Association of Improved Live Stock, wishes us to announce that reduced rates can be secured on all railroads running to Lansing by those who wish to attend the annual stock meetings which begin on the 21st inst. Those getting tickets should purchase them to Lansing, and the reduction is given on the return, on presentation of certificate of attendance, providing 100 certificates are issued. The certificates must be signed by the secretary of one of the live stock associations, or Mr. Butterfield can sign for any of them.

AMERICAN VS. ENGLISH WOOL-ENS.

Why is it that so many people in this country demand imported goods for their clothes? It is stated that the prejudice against American made goods is wearing away somewhat, but nevertheless it is a fact that at the present time nine out of every ten business men in the cities and towns inquire for, and insist upon having, imported cloth, especially for their "Sunday suits." It is hardly a prejudice against American goods, either, but due to an erroneous belief that the imported, and especially the English goods, must be superior to those of our own manufacture. Just why this is so is not apparent, except perhaps in the fact that a "prophet is without honor in his own country," and the mistaken notion among many that anything from afar must be better than the home product. But whatever the cause, it is a much to be lamented and unpatriotic certainty that American citizens, who would be indignant at the intimation that they did not consider their country the best in the world and her institutions the greatest, will demand foreign goods to cover their backs, and that too when the same price will procure American made goods from American grown wool of equal or better quality. This statement is substantiated by many prominent American tailors, and it is further stated that American made kerseys are for that matter indistinguishable from the English. This, then, is merely a prejudice to be overcome and even though it has no basis in fact, it will probably take some time to overcome it. That it will be overcome in time we are quite certain, for other articles of manufacture have had to meet the same prejudice, and overcome it. They have been successful in nearly every line, from bone buttons to locomotives, and from door locks to steel rails and iron bridges. As a matter of fact much of the woolens sold as "imported" were never outside of the United States, and their good quality is never disputed so long as their American origin is unknown.

AMERICAN CATTLE IN FRANCE.

Negotiations are said to have been, or are about to be, started, looking to the French embargo being taken off American cattle. At present neither American cattle nor American meats find their way into France, having been excluded under the transparently malicious assertion that they were diseased. Of course this contention is pure rot, and no one knows it better than the Frenchmen who had the restrictive measures put in force. It is not, therefore, probable that any success will attend negotiations looking to the end in view, without they are backed up by authority to place certain French products under the same restrictions as American cattle—wine, for instance. There is no doubt but that much of the low-grade French wines exported to this country are not only adulterated, but that substances injurious to the health of those who use them form a part of the adulterants. The vigorous enforcement of some such policy, if French markets for American cattle are really desired, will be found necessary before any progress can be made.

As a matter of fact, however, French markets are not at all desirable at present when better ones are to be secured. By shutting out foreign cattle, and raising the price of beef, French farmers were induced to go into the business of cattle raising much more extensively than formerly, with the result that their markets are now sup-

plied with all the beef which can be handled, and at much lower prices than formerly. To open their ports to American cattle, therefore, would mean a still further decline in values through increased competition, and while that undoubtedly would be welcomed by consumers, it would prove disastrous to agriculturists. The French government, since the days of the first Napoleon, has always looked closely after the interests of the agricultural classes, and aided them efficiently whenever possible. It is not likely, therefore, that the views of consumers will be given much attention when in conflict with the interests of French farmers. The aim of that government is to have the farming classes as prosperous as possible, as a surety of peace and contentment for the country, as those classes largely outnumber all others, and are naturally conservative and law-abiding. Hence, we don't think that American cattle are at all likely to force their way into the markets of France unless present conditions change very materially.

SHOULD WE ACQUIRE HAWAII?

The recommendations of President McKinley's message, and the determination of those who favor the annexation of the Hawaiian Islands, have brought this question into great prominence since the meeting of Congress. It has also stirred up much ill feeling among members of Congress and the public press, and all sorts of charges are made against each other by the angry disputants. It strikes us the whole question should be discussed in a calm and candid manner, and wholly from the standpoint of what the result would be to this country. If the question is settled in any other manner, and the islands become a part of the United States, there will always be a large party who will be pleased at any trouble which may arise in the future, and even willing to do what they can to increase any which may come from annexation.

Looking at the question as an American citizen, and conceding to those who think otherwise as great and earnest a desire to favor what they believe to be for the best interests of the country, it is our opinion that the annexation of those islands, or of any other territory separated from this country by even less distance, will finally prove disastrous to its peace and well being. We can see no added strength in the addition of such a population as that of Hawaii, while we can see a vulnerable point always open to attack whenever we have trouble with a foreign nation. The cost of maintaining and protecting the islands from foreign aggression will, we believe, offset all the commercial advantages which will come from annexing them. Their annexation means a largely increased navy, an addition to the regular army, large expenditures for putting the islands, and especially their harbors and towns, in a state of defense; forts must be built and garrisoned, harbors prepared for sheltering the war vessels which must be maintained, with proper docks for their repair. This work will have to be started on at once, for if the islands are acquired the honor and prestige of the nation will demand their defense. Then the compactness of the United States will be broken, and, as assuredly will be the case, the acquisition of this territory will be followed by others. We shall thus lose the great natural advantage we have at present of being practically unassailable by other nations, while these territories will surely lead to complications and troubles which may bring war at any moment.

Outside of the weakness which an-

nexion will bring we regard the character of the population of the islands as so undesirable that we should oppose the scheme for that reason alone if no other existed. With the few thousand Americans and English-speaking people now resident there no trouble need be feared; but the bulk of the population consists of natives, Chinese and Japanese, not at all desirable, and whose numbers are rapidly increasing, with the addition of some 25,000 lepers gathered from all parts of the world. Certainly the addition of such a population is not to be favored, especially when it is remembered that they must be enrolled as American citizens.

These are our reasons for opposing annexation, and we believe they are in consonance with the views of a large majority of the American people. Ambition for territorial aggrandizement should never be fostered by a nation situated as is the United States, and certainly it is entirely foreign to the policy under which it has grown great, prosperous and homogeneous.

THE BUSINESS OUTLOOK.

In their weekly trade review, issued on Saturday, R. G. Dun & Co. say of the outlook:

The opening of congress, with the annual message and reports, has not discouraged business as some predicted, but all speculative markets were stronger than a week ago. The productive industries, even in the season usually about the dullest of the year as to new orders, meet a definite improvement in demand for important products, presumably the fruit of a prevailing conviction that new business will begin to crowd the works after the new year starts. The outward movement of wheat and other products continues so heavy that foreign exchange has fallen three-quarters of a cent, and instead of exports of gold, which have marked December in recent years, imports would come if gold were wanted.

Securities are advancing with the increased earnings of railways, \$47,085,081 for November on reporting roads in the United States, 16.8 per cent larger than last year and 5.9 per cent larger than in 1892. A striking comparison for five years shows that in each of the last three months earnings have been greater than in any previous year, with a larger increase in November than in October or September.

The sudden rise in December wheat at Chicago to \$1.09 would do harm were it not based on avowed contracts to ship some millions of bushels to Europe. That fact and the continued foreign demand, in spite of such contracts, has helped a rise of 11.2c here. Western receipts for the week were 5,798,771 bu, against 3,691,374 bu last year, and Atlantic exports, including flour, 4,312,137 bu, against 2,975,651 bu last year, and so great is the foreign shortage that the outgo of corn last year, far greater than ever before, is again exceeded, 3,313,086 bu for the week, against 3,055,780 bu a year ago, with the price nearly 1c higher for the week. The report that western supplies are running low is discredited by receipts from farms. Cotton is a sixteenth stronger in spite of estimates ranging from 10,100,000 to 11,000,000 bales by well-known authorities.

The demand for woolen goods has clearly improved and more wool has just been purchased abroad and is being imported, the sales in domestic markets having been for the past week only 2,660,000 lbs at Boston, and in two weeks 11,050,400 lbs at the three markets. While some grades have been sold largely at prices lower than a month ago, quotations are generally maintained.

There is more demand for iron and steel products in preparation for railway work, bridges and buildings next year, and on contracts for export, including one for a government bridge in Holland and others for bridges in Japan, with large shipments of various products to England and other countries. Foreign contracts for 40,000 tons of rails are pending. In and about New York, bridge and building contracts call for 25,000 tons, and Chicago works are figuring on numerous contracts for 5,000 railway cars.

THE SALE OF BUTTER SUBSTITUTES.

To the Editor of the Michigan Farmer:

If you will allow me a little space in your valuable paper, I will say to you that in regard to the sale of butter substitutes I was aware that they had a right to sell them, but not colored so you cannot tell them from the best dairy butter. It was all colored, and I saw none of it but what was, and they made no bones over selling it, either. That is not all; you go to any second-class hotels and some of the first-class, too, and get your dinner or supper or breakfast, and see if you do not get butterine, and highly colored, too.

Now, Mr. Editor, is it not a fraud if you go to a hotel and get a meal and call for butter and they bring you butterine? Yet this is an everyday occurrence with them. All of the restaurants use it, and it is all colored. I know what I am writing about.

I am a producer of dairy butter, from 800 to 1,000 pounds a year; as a general thing I get from 20 to 25 cents per pound for it, and I think I know when I eat good butter.

You stated in reply to my letter of Dec. 4 that as long as butter substitutes were sold under their true name it would not injure the sale of choice butter. They were selling it as butterine, and there were ladies buying it. But I do not wonder that people buy it, as it is far ahead of two-thirds of the butter made. It is a disgrace to the good class of farmers and their products to have such stuff on the market. There should be some way to stop it, but there never will be as long as they will not try to learn how to make a better quality. I see our Dairy and Food Commissioner has been to Grand Rapids since my letter of the 4th, and he found but one place where they were not violating the law. There is a well-known brand of soda that is from one-third to one-half salt, and I could mention other articles that we use that are not pure.

Kent Co., Mich. JAS. SMITH.

LIVE STOCK MEETINGS.

The Michigan Shropshire Sheep Breeders' Association will meet at the Hudson house, Lansing, Mich., Tuesday evening, December 21. Herbert W. Mumford, secretary.

The annual meeting of the Michigan Merino Sheep-Breeders' Association will be held at Lansing, Mich., Tuesday afternoon and evening, Dec. 21, 1897. We hope to have a good attendance, and look for an interesting meeting. The afternoon will be devoted to the reading of papers and discussions, and the evening to business meeting, etc.

E. N. BALL, Secretary.

The Michigan Shorthorn Cattle Breeders' Association will meet in the Capitol at Lansing, Tuesday evening, December 21, at 7 o'clock, p. m. Program: Address by the president; reports of the secretary and treasurer; paper by Hon. W. E. Boyden, Michigan as a Shorthorn State; discussion. Reduced rates on the railroads. Secure certificates when you purchase tickets. I. H. Butterfield, secretary.

The seventh annual meeting of the National Lincoln Sheep Breeders' Association will be held in the senate chamber at Lansing, Tuesday, December 21, beginning at 9 a. m. The program for the meeting is as follows: Address by President Smith; minutes of previous meeting; secretary's report; treasurer's report; report of finance committee; appointing committees; address by Robert Gibbons, Conditions necessary to success with Lincolns; address by L. D. Burch, The future of the Lincolns in the United States; address by A. W. Lightbourn, The Wool Exchange, and benefits of same to the producer; address by J. Lewis Draper, Success with the Lincolns on the range; election of officers. Headquarters at Hudson house.

Those attending the annual meeting of the Michigan State Swine Breeders' Association, which occurs at Lansing, Tuesday, December 21, will meet at the agricultural laboratory of the Agricultural College at 11 a. m. At 1 o'clock the regular score card practice will commence under the direction of Mr. E. C. Rouse, of Albion. Good specimens of the different breeds will be examined and it is expected that a very instructive session will be held. The evening session will be held in the senate chamber at the capitol. An excellent program has been arranged. It is hoped that every breeder and feeder in the State will make an effort to

be present. Meals can be had at one of the clubs at the College. Reduced rates at hotels and on railroads. Geo. H. McIntyre is the secretary.

Detroit is enjoying another street railway war, and it appears to be a three-cornered affair, like Midshipman Easy's duel. The City railway is fighting the Citizens' company, and the city is after both lines. It is great fun for the lawyers, but the taxpayers of the city and the stockholders of the companies, who will have to foot the bills, are not very enthusiastic over the contest.

NEWS SUMMARY.

Michigan.

Chester W. Comstock, cashier of the Mecosta Savings bank, who was convicted of making false entries with intent to defraud the bank's depositors, is to have a new trial by decree of the supreme court.

Justice Chadwick, of Northville, has dismissed several cases against Detroit violators of the oleo law, on the ground that he had no jurisdiction. Commissioner Grosvenor will ask for a mandamus compelling the justice to try the cases.

Indignant farmers near Hastings, former members of the defunct Ionia, Eaton and Barry insurance company, have called a mass meeting to be held at Hastings, Saturday, December 18, to resist assessments now being pushed.

The investigation to discover the cause and place the blame of the recent serious accident on the Detroit & Oakland electric road, failed to reveal anything of a definite nature, but brought out some surprising things concerning the manner in which the cars are run. A blunder similar to the one which caused the recent accident came near causing a repetition of that fatality on Tuesday evening of this week. The patrons of the road are now demanding that the company put in some sort of a dispatch system, and it is probable that the managers will immediately take steps to comply.

General.

Mayor-elect Van Wyck has taken the oath of office as mayor of Greater New York, but will not formally begin his duties until January 1.

A steamer from Havana to New York brought 391 bales of tobacco last Monday, the first shipment from that port for many months.

President McKinley's mother died early Sunday morning and was buried in West Lawn cemetery, Canton, O., on Tuesday afternoon. The funeral was an extremely large one in spite of the disagreeable weather. Members of the president's cabinet and other notables from Washington were in attendance. Mrs. McKinley lacked but four months of reaching the age of 89.

The monthly statement of the Bureau of Statistics shows that the total imports of dutiable sugar during October last amounted to 182,998,945 pounds, valued at \$3,643,613, which is an increase over the September imports of nearly 73,000,000 pounds, and an increase in value of over \$1,200,000. Of these imports 5,036,550 pounds, valued at \$129,374, came from the Netherlands.

We present below a list of our premiums with prices for each, and in the second column the number of subscriptions to the *MICHIGAN FARMER* for which we will furnish the premium free. For a complete description of each article refer to the premium supplement sent each subscriber Nov. 6. All articles marked * are sent prepaid by us; on the others purchaser pays charges. No premiums are sent C. O. D., but we guarantee each to be exactly as represented or money will be refunded. Remit by bank draft, express or P. O. money order, or send cash by registered mail. Make remittances payable to The Lawrence Pub. Co.

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| *Sewing Machine, Oak or Walnut Case, | 13.00 | 50 |
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The Household.

CONDUCTED BY MRS. ELLA E. ROCKWOOD.

We should be pleased to have any of our readers who take an interest in household topics, send in their views and opinions upon any subject which is under discussion, or which they wish discussed. The invitation is general, and we hope to see it accepted by many. Address all letters for The Household to Mrs. Ella E. Rockwood, Flint, Mich.

For the Michigan Farmer.

A REVERIE.

"Christmas, the happiest day of the year,
With its wonderful presents and cousins
so dear;
Its nuts so rich and its candies so sweet,
Its puddings so good and its cakes so neat;
Is nearly here I'm glad to say."
That secret sweet to her doll one day,
In her happy, innocent, childlike way,
A little maid whispered as she paused in
her play.

"Christmas, the day of joy, love, and good
cheer,
Really, the day I love most in the year;
When "Merry Christmas" we hear, without
stint it does fall
From the lips of the noble, the great, and
the small;
While its presents so dear, because given
with love,
Come as a venison from above."

While chatting with a friend one day,
Those words I heard a pretty maid say.

"Christmas! How sweet it does sound to
the ear!
What joy it does bring! Blest day of the
year.
More eagerly I long for it than ever before,
For then our dear children will be with us once more.
Oh God! though our house seems vacar-
and cold,
Since loved ones have gone who shared it
of old;
We thank Thee that this day of our dear
Saviour's birth,
Each child is with us in our home here on
earth."
Through a window those words floated to
me one day,
From the lips of a mother, as I passed on
my way.

"Christmas, the day of all days the most
blest;
For you bring to me thoughts which give
me sweet rest.
My children have been gathered, one by
one,
Unto God the Father through Christ the
Son.
God has let me live fourscore years and
more
To prepare myself for the other shore;
But soon I shall stand before the Great
Throne
When I pray to hear God say 'Come, en-
joy thy own.'"
Thus spoke an old lady when Christmas
was near,
To a friend whom to her was held very
dear.

J. A. C. K.

HOME CHATS WITH FARMERS' WIVES.

THE LAST WEEK.

Only one week to Christmas. The intervening days will be busy ones to most of us, for there are usually a great many things crowded into a short space of time just at this season. If we are to entertain friends the preparations must be made and there are always little odds and ends of work among the presents to be finished. There will be hurried trips to town and mysterious bundles surreptitiously hidden away from prying eyes. There will be the packages to make up, labels to write and affix—in fact these will be just about the busiest days of the whole year.

But isn't it enough to inspire the dullest, gloomiest sort of person with the enthusiasm which ought to be an accompaniment of the holiday time to see the way the children behave? Aren't they just wild with excitement? How they gather together in out of the way nooks about the house to talk over something which seems to involve a great deal of mystery, and concerning which the advice of neither papa nor mamma is not at all desirable. Such whisperings and ejaculations of affirmation or objection, such giggling and laughing over the prospect of a surprise in store for their elders! Such "now you mustn't looks," and such cautions to the younger children not to tell!

Of course no parent worthy the name would spoil their pleasure by manifesting aught but greatest surprise when at last the supreme moment arrives and the fruit of childish effort is presented. It would not require a great proportion of mother wit to sound the proposed scheme to its depths long beforehand, but it would be the meanest kind of requital for their love to do so. Half the enjoyment of making a gift lies in the surprise attending its presentation, and any mother knows

how to look surprised upon such an occasion, whether she feels it or not.

It is well to think over the matter of our prospective gifts thoroughly beforehand, lest some whom we would be likely to overlook be forgotten. It sometimes happens that when it is over with we regret not having made one more present, added one more to the list of recipients remembered. I have known this to be the case myself. To avoid any unpleasant feeling in this respect go over the list carefully several days beforehand and note if anything of the kind is going to occur this year. I heard some one say last year after Christmas that she was sorry she had not bought something for a certain little boy and girl who were but meagerly remembered by Santa Claus. For the small sum involved surely none of us would like to have this thought, so the time to act upon it is now—before it is too late. Don't forget any whom you might make happy with little inconvenience to yourself. If it's nothing more than some candy and nuts or a fat mince pie stuck full of raisins it may help to fill somebody's Christmas with cheer.

Then there is the little girl who has no dolly. You may remember I spoke to you about that last year, and no doubt many of you responded with the doll. Don't forget to do the same this year if you know of any child who may be made glad by the gift of a dolly. Ten cents may cover the cash outlay, but who can place an estimate upon the happiness conveyed by this simple gift?

One thing more. It is not best to lead the children to think Christmas giving is largely intended to benefit themselves. Encourage them to give presents to other children to whom gifts less rarely come than to themselves. Self-denial may be profitably taught here. Let them share in the joy of giving as well as of receiving.

CHRISTMAS SHOULD BE MADE A JOYFUL DAY.

Christmas is the one day in all the year when care should be put aside. Let the very memory of all the bad and sad days of the year that is almost past be banished, as we prepare to make the Christmas feast a joyful one to the children around us. What better possession can we give them for their future lives than the remembrance of hours of happiness in their childhood home? The children's future lies, in a great measure, at our mercy. We are shaping it day by day by the form we give the present. Let rays of sunshine rest on these holidays when they look back on them from the heights of manhood or womanhood. The memories of the good times we had when we were children are a precious possession that no after sorrow can dim.

As the happy Christmas time approaches, mothers are puzzled about presents for their children, and perhaps a few hints to them may not come amiss. The hard times will not allow the spending of much money, but it does not take much money to make children happy. The mysteries and surprises which delight them can be achieved without the expenditure of much more than time and patience. Mothers can, themselves, make inexpensive gifts that will often please children longer than costly ones. The little folks anticipate so much pleasure at Christmas that they ought not to be disappointed; no parents should fail of making some preparation for their enjoyment. Let them help in whatever is going on. They are deprived of a great deal of pleasure when everything is done for them and nothing remains for them but to enjoy the labors of others. They should be encouraged to prepare little surprises for one another, to assist in decorating the house with evergreens, if they are to be had, and, above all, to remember the poor and needy. The older boys will be delighted to take the team and go to the nearest marsh for trees or branches of evergreen for decorating.

I remember one Christmas particularly, when we fastened our tree to the back of "papa's" arm-chair, and placed Santa Claus in effigy (if I may be allowed the expression) in the chair. By taking hat, coat, pants and boots, and a good supply of old clothing for "stuffing," Aunty and I manufactured an old "Santa" that at first made the little ones quite shy, thinking it really was some stranger, and then how they did laugh to think they had been fooled. It pleased older ones as well to see him with presents all around him, and the tree bright and shining above his head.

Another time we placed a table with

a bright spread upon it across one corner of the sitting room and constructed an arch of evergreen boughs above it, which was very pretty when trimmed with popcorn and the little presents tied on, while larger presents and two lamps burning brightly were placed on the table. Something must be reserved to put in the little stockings, for nothing pleases children better than to think that Santa Claus has been down the chimney during the night and hid some toy or treasure of some kind in the toe of their stockings.

One can make doughnuts and cookies in various shapes—boys, girls, pigs, dogs, etc., etc. Then there are wristlets and mittens for the boys; knitted shoes for mother; and cushions are acceptable to all. All these are inexpensive presents and one will feel amply repaid for their trouble in the pleasure afforded to others.

IRENE MAXWELL.

A CHRISTMAS-Y LETTER.

Dear Household Sisters: The soft, white flakes are sifting down and hiding the bare ground under a fleecy blanket. Thanksgiving, with its turkey and good cheer, is over and we begin to think of Christmas in good earnest now.

How much they miss, those people who put off buying their Christmas gifts till the last moment, and then go into the store with no idea what they want. I think that kind of people do not give because they love to do so, but because they think they must. Somebody has given them something and they must return the favor. They miss all the planning and thinking, and talking it over—so dear to every woman's heart—that is nearly half the pleasure of giving. If we hear some friend express a wish for something we treasure it up, if it is months before, and if it is possible we get it for her for Christmas. We picture to ourselves how surprised and pleased she will be to think we remembered what she said so long ago. And she will know that we think of her often and our gifts will have a double value.

I will try to tell you a few things that generally are acceptable to every housekeeper. First, I would say a subscription to some good magazine. Several of these are only \$1.00 a year now, and they are first-class in every respect.

A pretty picture nicely framed makes a good present. Books, too, should not be overlooked. A nice story book for a child does not cost but a trifle more and is much better than so many useless toys, that are soon broken and gone. Very pretty little willow baskets, in odd shapes, can be bought for ten cents, and when lined with satin or with crepe paper make nice handkerchiefs or letter baskets.

And do not overlook the aprons. Most any woman can find use for a new kitchen apron; if it is a big "motherly" one, so much the better, but do not buy calico or gingham to make them of, percale is so much better. It does not shrink, nor fade, like gingham, and irons so much easier, and wears so much better. Get three times the length you want your apron, and it will make two. Light print and white aprons are always in order.

Towels and handkerchiefs are old stand-bys, too, as are also table linen and handsome doilies and odd dishes. They never come amiss. A set of bone or berry dishes, a pretty cup and saucer, a set of fancy butter plates, a set of fruit plates or oyster bowls, or a pretty cake or bread plate. Those that were thoughtful enough to tuck away a few hyacinth bulbs in September are fortunate, for nothing could be daintier or sweeter than a hyacinth in bloom for a Christmas greeting to some friend.

By all means have a tree, an arch, a ladder, or something of the kind at home. We have had one for several years now and we all enjoy it, from oldest to youngest, and think it far preferable to going to a tree in any public place. The children love to string popcorn and make stars of silver paper to trim the tree. Cotton batting cut in strips and pulled up loose, strewn along the branches looks very much like snow, and adds much to the appearance of the tree. The excitement increases as the mysterious packages begin to peep out among the branches, and the tree grows more beautiful with every visit we make to it.

Christmas eve, when everything is ready, we light all the lamps and enjoy our lovely tree to our hearts' content. Friends and neighbors, sometimes a houseful, are there, and a jollier time you cannot imagine. Try it this year.

But do not forget that there are

places where Christmas is but a name. No Santa Claus ever comes down the chimney, and the little stockings hang limp and forsaken on the line behind the stove. Little eyes look longingly at them in the morning only to be mocked by their emptiness. If you know of one such place try and leave something there, be it even so little, for none of your expensive gifts given to friends who are perfectly able to buy them for themselves will give half the pleasure to them or to you, as the simplest presents will afford, if given in a place of this kind.

Coldwater. NELLIE LOUISE REED.

SOMETHING MORE FOR CHRISTMAS.

The dear old grandparents and aunts must not be forgotten at Christmas time, and if our kind editor will give me a corner in The Household I will tell its readers about a few Christmas presents I am making for my two aunts who are living with me. One of my aunts sits down to sew with her work-basket at her side, but she will put her thread and scissors in her lap. First her scissors will fall, then a spool of thread will fall and roll away from her and next will go the spectacle case. She said a bag fastened at her side would be so handy to drop these things into. I have made her a bag for Christmas; it is as follows:

A HANDY BAG.

It is made of dark red silk; is six and a half inches long and five inches wide after it is made. It is turned in at the top three-quarters of an inch and draw-strings run through. Put the strings in from opposite ways. One yard of red ribbon half an inch wide is used for the strings. Tie the ends in small bows, and to one bow is fastened a clasp pin. When the bag is in use open it out full and with the clasp pin catch the other end of the string, at the bow, and pin the bag at the side of dress belt. In the bag I put a new, silver thimble and a pair of scissors that are rounded at the points.

CAP BAG.

From some very thick pasteboard cut two round pieces nine and one-half inches in diameter. From one side of each piece cut off enough to make a straight edge of eight inches in length. Cut a strip of pasteboard five inches wide and long enough to reach around the rounded edges up to where they are cut straight across. Cover these three pieces on both sides with French sateen, dark blue ground with small gay-colored flowers. Sew the two side pieces to the long strip; this makes the box for holding the cap. Take a piece of the same sateen long enough to reach all around the top opening and have it seven and one-half inches deep. Join this and sew it around the top on the inside. Turn a hem one inch and a half wide at the top and run places for draw-strings. Put the strings through opposite ways. The strings are three-fourths inch wide, blue worsted braid. Around all of the seams, where the sateen is sewed together, and where the sateen is sewed around the top, is a box pleating of dark red silk braid half an inch wide. This cap bag will be a useful present for an old lady. If going visiting it is handy, also in the dressing room.

SPECTACLE CASE.

Take two pieces of gold-colored silk six and a half inches long and one and three-quarter inches wide; cut them a little rounding at both ends. Line these two pieces with chamois skin, put the pieces together and baste around the edge. Do not turn in the edges. Take some bright green embroidery silk and buttonhole stitch them together around the edge. At one end leave them open one and a quarter inch, and put the same stitch around the open end. This opening is to let the spectacles into the case. On each point of the open ends put a piece of green ribbon six inches long and half an inch wide; tie the case together with this. On one side of the case and going lengthwise put "Spectacles," in fancy letters, done with the green embroidery silk.

KNITTING BAG.

Make a black satin bag ten inches long and seven inches wide. Have it this size after it is made. At the top is a hem wide enough to run draw-strings through. Put the strings in from opposite ways. The strings are one inch wide black ribbon, and tied at the ends in bows. On one side is embroidered with gold-colored embroidery silk, in large letters, "Knit-

ting." On one bow fasten a clasp pin, and when the bag is being used catch both bows with the pin, and then with this same pin fasten the bag to the side at the waist. This bag is intended to hold the ball of yarn while one is knitting. Close the top of the bag, leaving just enough open for the yarn to come through easily. When done knitting, put the work into the bag, unpin it from the side and hang it up.

I have made two cap bags, three knitting bags and two spectacle cases. They are real pretty; are easily made and the material used in knitting them is not very expensive.

TOBACCO POUCH.

A little bag made of chamois skin, four inches long, three inches wide, with "Tobacco" embroidered with green silk on one side, and green silk braid draw-strings, makes a nice little present. Fill this little bag with tobacco and see how pleased grandpapa will be with it.

ILKA.

SOME CHRISTMAS GOODIES.

A Good Plum Pudding.—One quart of rich sweet milk. Beat six eggs very light and stir them into the milk alternating with one quart of sifted flour. Pick, wash and dry one pound of currants and stone and cut in halves one pound of raisins; cut into very thin strips half a pound of citron. Now stir into the flour batter three-quarters of a pound of beef suet, carefully picked and chopped as fine as possible; stir these thoroughly and then add the raisins, currants and citron, half a pound of white sugar, one grated nutmeg and a large tablespoonful of powdered cinnamon and mace mixed. Mix the whole well and stir it hard. Then put it into a thick pudding cloth that has been scalded and well floured; leave room for it to swell and tie it very firmly. Put the pudding into a large pot filled with boiling water, and boil it steadily for five hours, filling the pot from a boiling kettle, as the water boils from the pudding. Have ready some blanched almonds cut in half lengthwise. Stick the almonds over the outside of the pudding soon as it is taken out of the cloth. Send it to table smoking hot. Eat with any sauce you choose.

Orange Pie.—Three eggs well beaten (save the whites of two), one cup of powdered white sugar, two oranges, the juice of both and the grated rind of one, a piece of butter the size of an egg. Cream the butter and sugar, stir into it the orange, then the beaten eggs; stir well together. Line a pie plate with rich paste, pour in this mixture and bake. Beat the whites with three tablespoonfuls of pulverized sugar; when the pie is done spread this pasting over the top; put back in the oven and brown lightly.

Chocolate Spice Cake.—Half a cup of butter, one cup of granulated sugar, three eggs—saving the whites of two; beat the eggs well; half a cup of rich sweet milk, one and a half cups of sifted flour, one small tablespoonful of baking powder, three level teaspoonfuls of powdered cinnamon. Cream the butter and sugar together, then add the beaten eggs, next the milk, then add the flour and spice alternately. Stir well. Bake in two layer tins. Chocolate filling.—Whites of two eggs beaten with six heaping tablespoonfuls of powdered white sugar. One square of Baker's chocolate dissolved on the stove in a small pan; when it is melted pour into the beaten whites and sugar and mix thoroughly. Spread this between the two layers and on top of the cake.

Layer Cake.—Cream three-quarters of a cup of butter with two cups of white sugar. Add one cup of sweet milk, then two and one-half cups of flour, mixed with two teaspoonsfuls of baking powder. Sift the flour and powder and mix. Next add the whites of four eggs well beaten, and flavor with one tablespoonful of lemon juice. Take five tablespoonfuls of this mixture and add a level teaspoonful each of powdered cinnamon and nutmeg, one cup of seeded raisins, half a cup of thinly sliced citron, half a cup of good molasses and one small cup of flour. Stir these all together. Bake this dark mixture in one layer and make two layers of the white part. The white part will bake quicker than the dark. Put together with boiled icing, the dark layer in the middle.

Oyster Pie.—Make a puff paste of half a pound of butter to two pounds of sifted flour. Roll it out rather thick into two sheets. Butter a deep baking dish and line the bottom and sides of it with the paste. Put in the oven and bake about half done—the oysters should not be as much cooked as the

crust. When the paste is sufficiently cooked put in the oysters, enough to almost fill the dish. Make a gravy of half the oyster liquor, thickened with yolks of three hard boiled eggs grated, and pieces of butter rolled in bread crumbs and seasoned with salt, pepper and nutmeg. Stew this five minutes and pour it over the oysters in the paste. Notch the edges of the pie in a pattern. Make a slit in the middle of the lid, and when the pie is sent to table put a tiny branch of holly leaves and berries in the slit. Serve the pie warm and in the dish it is baked in.

ILKA.

HOW TO TREAT BOYS.

We often see articles written at length concerning the duty of a sister towards her brother, whether she be older or younger than he. But for once we will change and say a word to the mothers, perchance his sisters have all left the paternal roof.

He comes in at night, "tired out with a day of it," either playing or working, and no sooner than he gets in the house, he is sure to do something to irritate his, perhaps, over-tired mother, and immediately she, it may be, unintentionally, says something in a fretful tone, and begins to scold him to the effect that he is the torment of the house; no one can have any peace when he comes in, etc. If he is an over-sensitive boy, as many whom I know are, he will retort, "Well, if I can't be left alone, I'll not stay in the house," and before the mother is aware, she has put a thorn in the flesh that is hard to heal. That may be the beginning of his drifting away from the family fireside.

Later, when the evenings are long, his mother thinks he ought to read certain books, which are contrary to his tastes. Do you suppose he will enjoy or get any good from the book, providing she has not fully lost control of him and he endeavors to read it?

Mothers, we know you mean right, for who is more anxious about the boy than mother? But be careful lest some word spoken to the over-sensitive one give offense, therefore making a breach in the home. Endeavor to make the boys feel that you are their friend in both fun and trouble; encourage them to tell you of their sports, plans, etc. Find out what they like to read, and if possible, procure the books. Do not for an instant let them feel that they are not an important factor in the home, for they are.

NATLIE H.

MEN'S DOUBLE MITTENS.

I will try to tell how I knit double mittens. Of course the size of the yarn and size of the hand must be considered. Use two colors.

I set up 56 stitches, knit the wrist ribbed, knit two and seam two, using but one color of yarn. Knit half a finger in this way, then put in the other color. I used red and blue, knit one stitch of red, then one of blue, keeping blue thread on top. Knit once around then widen for the thumb by leaving two stitches on the end of one needle and widen by picking up a stitch between them, knit it same color as the last one, making two stitches alike. Now knit the first stitch on the next needle, then pick up the next stitch as before, making it same color as the following one. Next knit twice around, widening as before, being careful to pick up a stitch between the two that are alike and knit with the other color so as to preserve the stripes. Continue to widen in this way until you have made ten stitches on each side. Slip these 20 stitches off onto a coarse thread and set up new stitches to form the part of the hand where it joins the thumb. Knit round and round until the hand is long enough to begin to narrow, then begin in the middle of a needle and slip one, narrow, pass slipped stitch over. Narrow on each needle in this way every time around until the number of stitches is reduced to eight and narrow these off. Then pick up thumb stitches and knit in the same way, narrowing same as the hand.

If this is not plain I will try to make it so.

MRS. S. S. C.

PLEASED WITH IT.

Portland, Mich., Nov. 8, 1897.
Michigan Farmer:

Dear Sir—We received the sewing machine all right and are very much pleased with it so far.

Portland, Mich. MRS. FRANK WAY.

If bread comes out of the oven with too hard a crust rub it over with butter, which will soften it nicely.

FROM OUR WASHINGTON CORRESPONDENT.

I wonder what kind of weather you are having in Michigan? Here it has been raining for two days and three nights, and last night (Nov. 13) it snowed and froze a very little.

We finished threshing the last day of October; some of our neighbors have not yet threshed. Our wheat went 40 bushels to the acre and barley 60 bushels. One of our neighbors had oats that he claimed yielded 80 bushels to the acre. This year's grain has averaged more than has ever before been known in the history of the state. Truly we have a good deal to be thankful for.

I want to tell you about our fine onion patch. We had just half an acre planted in a young orchard, and we gathered 150 bushels of fine onions, many of them weighing two to three pounds, and one big fellow weighed three pounds and ten ounces. We had some of them at the Spokane Fair and they were the finest there.

Last week we butchered and I have been making headcheese and sausage. I shall make mince meat this week, and then I will be about through.

My little 5-year-old boy was saying his prayers the other night and I smiled when he came to where it said, "In the kingdom of thy grace, give a little child a place." He said: "In the kingdom of thy grace, give a child a little place."

SISTER MARY.

Whitman Co., Wash.
(We fear this account of Washington's harvest will create in our Michigan farmers a desire to emigrate.—Ed.)

THE MORNING BEVERAGE.

I will tell the Household readers how I make coffee which my husband says is good, and he is very particular about his coffee, too.

I take one heaping tablespoonful for each person, then add one teacupful of boiling water and let it boil from three to ten minutes, then add half a cup more water and let it stand a few minutes; then put in one-fourth cup cold water and it is ready to pour. This may be too strong for some, if so more hot water may be added. Always measure the water, then you will have it the same every time. We prefer our coffee ground rather coarse, as it is not so liable to be muddy. The old rule is one tablespoonful for each person and one for the pot.

MRS. S. S. C.

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Portland, Mich. MRS. FRANK WAY.

If bread comes out of the oven with too hard a crust rub it over with butter, which will soften it nicely.



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MICHIGAN FARMER, Detroit, Mich.

Legal Department.

CONDUCTED BY EARL D. BABST,
56 Moffat Building, Detroit.

Husband Agent of Wife—Heirs of Married Woman Leaving Two or More Children.—E. H. P. Plymouth, Mich.—In 1850 Mr. and Mrs. A deed a farm to B, and B deeds it back to Mrs. A. In 1890 Mrs. A dies, leaving Mr. A and children. From 1850 up to date the farm has been assessed to Mr. A and he has paid the taxes with the proceeds of the farm, taking the receipts in his name. Who are the legal heirs?—When the property was deeded by B to Mrs. A it became her separate estate. The fact that the husband has paid the taxes from the proceeds of the land, taking receipts in his own name, would not vest title in him, as he would be deemed to have been acting as his wife's agent; therefore, at Mrs. A's death the farm would go in equal shares to the children, and children of deceased children by right of representation, and Mr. A would take no interest whatsoever.

Removal of Property under Chattel Mortgages and Bills of Sale.—Subscriber, Ionia Co., Mich.—If a man mortgaged a piece of machinery in a certain town, can he move it to another town in the State for his own use? If he gives a bill of sale can he move it?—1. Removing chattel mortgaged goods is unlawful, when such removal is made with the intent to injure or defraud the mortgagee or assignee of said mortgage. The burden of proof is on the person removing the goods to show that there was no fraudulent or injurious intent. The best way is to obtain the permission of the mortgagee first; in fact, most mortgages are so drawn as to require written permission. 2. A bill of sale conveys title, and personal property acquired thereunder may be moved at pleasure, unless such sale is intended to operate as a chattel mortgage, in which event it would be governed by the principles applying to chattel mortgages, as outlined above.

Board of Supervisors not a Judicial Body or Court of Appeals Such as May Review or Set Aside a Decree of the Circuit Court.—G. S., Mendon, Mich.—Three years ago, feeling myself aggrieved with an unjust drain assessment, I had it returned, and when it came up in two years in the Circuit Court, the papers could not be found in the county clerk's office, and the court held the assessment to be illegal and ordered the tax removed. Now, the Board of Supervisors has reassessed the tax, claiming that the papers were in the county clerk's office, but were not on file and that it was not necessary to have them on file. Is it necessary to have the papers on file? Can the supervisors re-assess the tax, without first having the circuit court's decree set aside?—According to your statement of the case the circuit court has held the assessment illegal, as the papers were not to be found. We could not pass upon the opinion of the court. But as the court has held the tax illegal, it ceases to be a tax, and the Board of Supervisors has no authority or right to re-assess.

Payment of City Taxes as Become Seller and Purchaser of Real Estate—Remedy Under Warranty Deed.—Subscriber, Mich.—A buys a city lot in September of C, who gives A a warranty deed saying the lot is free and clear of all incumbrances. There is, however, July tax against the lot which is not paid. Who should pay this tax? Is the lot holding for the tax, or is C, if he is responsible?—The answer to the above hinges on when the tax becomes a lien upon the land. The general tax law makes taxes a lien upon real estate on December 1 of the year in which they are levied. But this does not apply to city taxes of Detroit, the Supreme Court having decided that Detroit city taxes become a lien on July 1, when the roll comes into the hands of the receiver of taxes. And it has also been held that if the conveyance is previous to the date on which the taxes become a lien on the real estate the obligation to pay the tax is on the purchaser, but if the conveyance is made after such date the one who sells the property must pay the tax. We do not know to what city you refer, but if in the city you speak of the rolls come into the hands of the receiver of taxes on July 1, and the sale was not consummated until September, C should pay the tax. A's proper course is to pay the tax if O

refuses to do so and then sue C on the warranty for the amount so paid. If the tax is not paid, the authorities would make no attempt to collect from C, but the land would be sold for taxes in the usual way.

Dogs Attacking Sheep May be Killed When Caught in the Act—Payment of Claim.—H. D. K., Rice Creek, Mich.—Please give the text of the law regarding sheep-killing dogs. 1. May people kill them? 2. Does the township have to pay damages for sheep killed?—1. Any person may kill any dog that he may see chasing, worrying, wounding or killing any sheep, lambs, swine, cattle or other domestic animal out of the enclosure or immediate care of the owner or keeper. 2. Every township is required to levy a dog tax. Whenever a person has sheep killed or wounded by dogs he may call a disinterested justice of the peace to view the killed or wounded sheep or lambs, and if satisfied the injury was done by dogs, the justice shall deliver to the township clerk a certificate of the amount of damage done. When the township board meets in April they must examine these certificates and if they are satisfied the claims are just, and that the owner of the sheep has been unable to obtain satisfaction from the owner of the dogs, they may order the payment of such claims if the dog tax fund be sufficient, and if it is insufficient, they may order a proportionate payment of each claim.

The Markets.

WHEAT.

The market has been less irregular the past week than the previous one, but values have held quite steady. Trading is very light, and generally there would be a decline in prices under present conditions, but all are afraid to take the "bear" side at present with the outcome of the December option still hanging in the balance. The market closed firm Thursday, with a fair outlook for holders, and we should not be surprised to see a big advance towards the close of the month, perhaps the last two or three days. The fight between the Armour and Leiter people is still on, and until it has been fought out it will be hard to foresee what the future has in store for holders of wheat.

The following table exhibits the daily closing sales of spot wheat in this market from November 26 to December 16 inclusive:

| | No. 1 White. | No. 2 Red. | No. 3 Red. |
|---------|--------------|------------|------------|
| Nov. 26 | 93 | 92½ | 89½ |
| " 27 | 91½ | 91½ | 87½ |
| " 28 | 90 | 90½ | 86½ |
| " 29 | 90½ | 90½ | 86½ |
| " 30 | 89½ | 90½ | 85½ |
| Dec. 1 | 88½ | 89½ | 85 |
| " 2 | 88½ | 89½ | 85 |
| " 3 | 89½ | 90½ | 86½ |
| " 4 | 90 | 90½ | 86½ |
| " 5 | 89½ | 90½ | 85 |
| " 6 | 90 | 91 | 87 |
| " 7 | 89½ | 90½ | 87 |
| " 8 | 91 | 92 | 88 |
| " 9 | 91 | 92 | 88 |
| " 10 | 91 | 92 | 88 |
| " 11 | 90½ | 92 | 88 |
| " 12 | 90½ | 91½ | 87½ |
| " 13 | 91 | 92 | 88 |
| " 14 | 91 | 92 | 88 |
| " 15 | 91½ | 92½ | 88½ |
| " 16 | 92 | 93 | 88 |

The following is a record of the closing prices on the various deals in futures each day during the week:

| Dec. | May |
|-----------|-----|
| Friday | 92 |
| Saturday | 92 |
| Monday | 91½ |
| Tuesday | 92 |
| Wednesday | 92½ |
| Thursday | 93 |

The visible supply of wheat on Saturday last in the United States and Canada was 34,744,000 bu, as compared with 34,845,000 bu the previous week, and 54,234,000 bu at the corresponding date last year. The decrease for the week was 101,000 bu.

Broadbent's report showed an increase of 333,000 bu in world's visible wheat stocks. East of the Rockies wheat increased 83,000 bu. Stocks of wheat in and afloat for Europe increased 300,000 bu. Corn decreased 470,000 bu; oats, 79,000 bu.

A cable report says that stocks of wheat in the hands of millers and others are very light, and requirements from November 1 to end of season are estimated at 60,000,000 bu.

The early sown portion of the French wheat crop appears to give much satisfaction to growers. This country has continued to buy wheat freely on the international market, and it seems pretty certain that there are big requirements to be filled; indeed some people go so far as to assert that very soon the bulk of the demand in France will be directed to foreign wheat. In the meantime prices rule very high, both at Paris and on provincial markets; farmers offer but meager quantities, and once more there is talk of a possibility of the import duty being reduced.

A year ago country elevators had very much more grain than now, and two years ago they contained more than twice the present quantity. The best information that can be obtained from the farms is that, owing to satisfactory prices, farmers have moved their wheat more in proportion than in any recent late year. The prospect is, therefore, that the quantity to come forward will be quite as disappointing, owing to its meagerness in the latter part of the season, as it has been so far on account of its large volume.—Northwestern Miller.

Bearbohm is now out with a statement showing that the world's crop of wheat is 208,000,000 bu less than the average for the past six years and 160,000,000 bu less than last year.

Some statistics just issued from the ministry of agriculture leave no doubt that about fourteen governments will this winter and spring suffer severely from famine. The governments affected lie in the black soil zone, and are dependent almost entirely on agriculture. In the famine of 1891 twenty governments were affected, including those which suffer this year. The preliminary statistics of the harvest of 1897 show a deficiency in rye, wheat, oats and barley of 1,000,000,000 bushels, compared with the yield of 1894. The last two years have also been below the average; and in addition to the hay crop, other cattle foods as well as potatoes give a very poor return this year. As a result the peasants must sell or kill their cattle and horses, leaving themselves absolutely helpless.

DAIRY PRODUCTS.

BUTTER.

Our local market has weakened since our last report, owing to largely increased receipts, drawn out by the satisfactory prices of the previous two weeks. While quotations are unchanged, there is less strength in the market. Besides the increased receipts the warm moist weather has had a depressing effect on the trade. Quotations by the trade range as follows: Creamery, 22@23c; fancy dairy, 16@17c; fair to good, 14@15c; low grades, 9@10c per lb. The Chicago market is reported as slow, and inclined to weakness, but this is ascribed largely to unfavorable weather conditions. Values have held about steady, however, and no immediate change is looked for. Quotations in that market on Thursday were as follows: Creamery, extras, 22c; firsts, 19@21c; seconds, 14@17c; June creameries, 18@19c. Dairies, extras, 19c; firsts, 16@18c; seconds, 12@13c. Packing stock, fresh, 13c; roll, 12@14c. At New York about the same conditions exist as in this market. The demand has been very light from all sources, and the market is dull and irregular with some decline in prices. Receipts increased materially during the week, and this helped depress the market also. Quotations at the close on Thursday were as follows: Creamery, Western, extras, per lb, 23c; do firsts, 20@22c; do thirds to seconds, 15@20c; do State, fancy, 22c; do firsts, 20@21c; do thirds to seconds, 15@18c; do June make, 21@21½c; do firsts, 19@20c; do seconds, 16@18c; State dairy, half-firkin tubs, fancy, 20@21c; do Welsh beef, fancy, 19@20c; dairy tubs, firsts, 17@18c; do thirds to seconds, 13@16c; State dairy, firkins, fancy, 19c; do fair to choice, 16@18c; imitation creamery, fancy, 18c; do seconds to firsts, 13@16c; factory, fresh, extras, 17c; do firsts, 14@15c; do seconds, 13@13½c; do low grades, 12@12½c; do June make, extras, 14@15c; do thirds to firsts, 12½@14c; rolls, fresh, 12@17c.

CHEESE.

All markets are dull and slow, and while prices show little change there is a very slow market for everything except some special grades. Continued dullness in Liverpool has weakened eastern points. In this market values are unchanged, quotations ranging from 10½@11c for fair to choice full cream stock. At Chicago the market is reported slow, with sales generally at last week's prices. Quotations at the close on Thursday were as follows: Young Americas, 7½@8c; twins, 7½@8c; cheddars, 7½@8c; Swiss, 9½@10½c; Imburger, 7@10c; brick, 8@10½c. The New York market is about steady on prime full cream September and October cheese, and choice light skims for the export trade, but values are very low for the season. The New York Tribune in its weekly review of the market says: "The current receipts of full cream cheese have continued comparatively moderate, and with a fair demand from exporters for late ends the feeling was a trifle firmer during the latter portion of last week, with really desirable lots not obtainable below 7½c. So far this week, however, exporters have generally refused to pay more than 7½c for best available lots, and the little business done has been on that basis. Exporters have shown more interest, however, in finer cheese, and several large-sized lots have been taken both from platforms and from store of September and early October cheese on private terms, but generally supposed to have been at 8½c. The home trade demand has not been a factor of much importance the last week, and as we are now rapidly approaching the holiday season, it is doubtful if there will be much increase in the trading until after the turn of the year." Quotations in that market on Thursday were as follows: State, full cream, large, fancy, September, 8@9½c; do late made average finest, 7½c; do fair to good, 7½@8c; do common, 6½@7c; do colored or white, small, fancy, 7½c; light skims, small, choice, 6½@7½c; do large, 6c; part skims, small, choice, 6c; do large, 5½c; do good to prime, 4½@5c; do common to fair, 3½@4c; full skims, 3c.

At Liverpool on Thursday the finest white and colored American cheese was quoted at 42s. 6d. per cwt. of 112 lbs, the same price as quoted a week ago, with a very quiet market.

DETROIT PRODUCE MARKET.

Detroit, December 16, 1897.

FLOUR.—Quotations on jobbers' lots in barrels are as follows:

| | |
|----------------------|------|
| Straights | 5.00 |
| Clear | 4.75 |
| Patent Michigan | 5.50 |
| Low Grade | 4.00 |
| Rye | 3.25 |
| Buckwheat | 4.00 |
| Granulated corn meal | 1.75 |
| Cream corn meal | 1.60 |

CORN.—The visible supply of this grain on Saturday last in the United States and Canada was 46,680,000 bu, as compared with 39,940,000 bu the previous week, and 17,461,000 bu at the corresponding date in 1896. Quotations in this market are as follows: No 2, 29c; No 3, 28½c; No 2 yellow, 20½c; No 3 yellow, 30c.

OATS.—The visible supply of this grain in the United States and Canada on Saturday last was 14,349,000 bu, as compared with 15,462,000 bu the previous week, and 11,359,000 bu at the corresponding date in 1896. Quotations are as follows: No 2 white, 24½c; No 3 white, 24½c per bu.

RYE.—The visible supply of this grain in the United States and Canada on Saturday last was 3,681,000 bu, as compared with 3,553,000 bu the previous week, and

2,582,000 bu at the corresponding date in 1896. No 2 spot quoted at 46½c per bu.

BARLEY.—The visible supply of this grain in the United States and Canada on Saturday last was 4,889,000 bu, as compared with 4,750,000 bu the previous week, and 5,493,000 bu at the corresponding date in 1896. Quoted in their market at 75@80c per hundred lbs.

FEED.—Jobbing quotations on carload lots are as follows: Bran and coarse middlings, \$1; fine middlings, \$1½; cracked corn, \$1½; coarse cornmeal, \$1; corn and oat chop, \$1 per ton.

CLOVERSEED.—Prime selling at \$3.17½ per bu for spot, March delivery at \$3.25; No 2 selling at \$2.80@2.90 per bu.

BUTTER.—Dairy has declined during the week under large receipts and rainy weather. Quotations are as follows: Creamery, 22@23c; fancy dairy, 16@17c; good to choice, 14@15c; common to fair, 12@13c; low grades, 9@10c per lb.

EGGS.—Quoted at 18@19c for fresh receipts; storage lots, 13½@14c per doz.

POULTRY.—Quoted as follows: Dressed turkeys, 10@11c; dressed chickens, 7@7½c; dressed ducks, 8@9c; dressed geese, 7@8c per lb. Live poultry 16@20c per lb less.

BEANS.—Market shows an advance, and holds firm at 95c@\$1.00 per bu.

APPLES.—Good fruit selling as follows with a fair demand: Fair, \$2@2.50; Spy and Baldwin, \$3@3.25; wine, \$3.75; Snow, \$4@4.25 per bbl.

CRANBERRIES.—Selling at \$8 per bbl for Cape Cod.

CABBAGES.—Quoted at \$3.50@4 per ton.

POTATOES.—Good Michigan stock selling at 50@55c per bu in carload lots; in small lots, 60@65c is paid. Market firm. At Cleveland fancy white varieties are quoted at 65@70c per bu; good to choice, 55@60c; car lots, 52@55c per bu.

ONIONS.—Michigan are quoted at 50@60c per bu.

RUTABAGAS.—Quoted at 20@25c per bu.

HONEY.—Comb, new, quoted at 9@10c; fancy white, 11@12c per lb.

DRESSED HOGS.—Selling at \$3.25@3.75 per hundred lbs.

TALLOW.—Quoted at 3½@3½c per lb.

DRIED FRUITS.—Evaporated apples, 8½@9c; evaporated peaches, 10@12c; dried apples, 5½@6c per lb.

GAME.—Jack snipe, \$1.50 per doz; golden plover, \$1.50 per doz; ducks, per pair, canvasbacks, \$1.25@1.50; mallards, 65@75c; redheads, 65@75c; bluebills, 30@35c; widgeon and pintails, 25c; wild geese, 50c each; rabbits, 65@75c per doz; fox squirrels, 75c per doz; bear, 12½c per lb for carcasses.

PROVISIONS.—Barreled pork is lower, other articles unchanged. Quotations are as follows: Mess pork, \$3.75 per bbl; short cut mess, \$10.50; short clear, \$9.50; compound lard, 4½c; family lard, 4c; kettle lard, 5c; smoked hams, 8½@9½c; bacon, 9½@10c; shoulders, 5½c; picnic hams, 5½c; extra mess beef, \$3.75; plate beef, 75c.

HIDES.—Market firm. Latest quotations are as follows: No 1 green, 7½c;

No 1 cured, 9c; No 2 green, 6c; No 2 cured, 8½c; No 1 cured calf, 10½@11c; No 2 cured calf, 9½@10c; No 1 green calf, 9c; No 2 green calf, 7½c per lb; sheepskins, as to wool, 50@75c; shearings, 20@35c.

HAY.—Baled quoted as follows: Best timothy in car lots, \$8.50@9 per ton; No 2 timothy, \$7.50@8. Baled straw—Wheat and oats, \$4 per ton; rye straw, \$5 per ton.

COFFEE.—Revised quotations are as follows: Roasted Rio, ordinary 9c, fair 11c; Santos, good 11c, choice 18c; Maracaibo, 20@25c; Java, 26@30c; Mocha, 28@32c.

OILS.—Linseed oil is higher, as is turpentine. No other changes. Quotations range as follows: Raw linseed, 39c; boiled linseed, 4c per gal, less 1c for cash in ten days; extra lard oil, 40c; No 1 lard oil,

SHEEP AND LAMBS.

Receipts Friday, 359; one week ago, 315. Market active and strong. The highest price to-day was \$5.50 for a small bunch of choice lambs av 92 lbs.; balance as noted.

Roe & Holmes sold Mich Beef Co 14 lambs av 84 at \$5.00 and 22 fat butchers av 124 at \$4.00.

Carmen sold Hammond, S & Co 45 lambs av 83 at \$5.00.

Younger & Moore sold Fitzpatrick 12 choice lambs av 92 at \$5.50.

McRoberts sold Sullivan Beef Co 22 lambs av 75 at \$4.70.

Spicer & M sold Mich Beef Co 31 lambs av 60 at \$5.10, 12 do av 66 at \$5.00 and 10 mixed at 88 at \$3.50.

Messmore sold Monaghan 29 mixed av 73 at \$3.35 and 30 lambs to Young av 75 at \$5.10.

McMullen sold Monaghan 30 mixed av 97 at \$4.25.

Hausler sold same 20 mixed av 87 at \$4.00.

Spicer & M sold Hammond, S & Co 42 most lambs av 69 at \$4.65.

HOGS.

Receipts Friday, 3,976, as compared with 5,811 one week ago. Market active and strong to 5c higher than above quotations. Bulk sold at prices ranging from \$3.25 to \$3.75.

Fox & Bishop sold Parker, Webb & Co 133 av 192 and 111 av 208 at \$3.27 1/2.

Robert & Spencer sold same 99 av 212 at \$3.25.

Roe & Holmes sold same 76 av 201 at \$3.25.

Brown sold same 56 av 196 at \$3.25.

Roe & Holmes sold same 21 av 179 and 66 av 220 at \$3.25.

F W Horner sold same 124 av 228 at \$3.25.

Buck sold same 52 av 202 and 59 av 190 at \$3.25.

Harwood sold same 115 av 195 at \$3.25.

Roe & Holmes sold same 61 av 226 at \$3.25.

Judson sold same 57 av 212 at \$3.25 and 90 av 186 at \$3.25.

Fox & Bishop sold same 94 av 190 and 64 av 198 at \$3.25.

Kenney sold Hammond, S & Co 58 av 206 at \$3.25.

Parsons & H sold same 134 av 203 at \$3.27 1/2.

McMullen sold same 31 av 223, 93 av 227, 42 av 244 at \$3.27 1/2 and 73 av 210 at \$3.25.

Luckie sold same 127 av 206 at \$3.27 1/2.

Spicer & M sold same 42 av 224 at \$3.27 1/2.

Bullen sold same 128 av 211 at \$3.25.

Nixon sold same 76 av 190 at \$3.27 1/2.

McRoberts sold same 48 av 232 at \$3.25.

La Duke sold same 34 av 212 at \$3.25.

Horne & R sold same 68 av 236 at \$3.27 1/2.

Hauser sold same 126 av 201, 33 av 205, 141 av 200 and 29 av 230 at \$3.27 1/2.

McMullen sold same 80 av 212 at \$3.27 1/2.

Robb sold same 66 av 212 at \$3.27 1/2.

Cassey sold same 87 av 209 at \$3.25.

Green sold Sullivan 118 av 173 at \$3.30.

Patrick & P sold same 70 av 190 at \$3.25.

Moore sold same 99 av 217 at \$3.25.

Spicer & M sold same 63 av 201 at \$3.25.

December 16, 1897.

CATTLE.

Receipts Wednesday and Thursday, 474; direct to butchers, 46; on sale, 428, as compared with 390 one week ago. Of good average butcher quality. A few sold Wednesday brought about last week's prices. Trade opened active and higher.

Thursday all sold early, closing firm.

Five dollars was top price to-day for 2 choice steers av 1,165 lbs, and one weighing 1,420 lbs; \$4.60 for 5 do av 1,252 lbs, and \$4.30 for 2 heifers av 1,266 lbs; but the bulk changed hands at prices ranging from \$3.00 to \$4.25; old cows and common butchers, \$2.50 to \$3.00; bulls, good fair butchers, \$3.00 to \$3.60; light to good, \$2.50 to \$2.90; stockers and feeders, \$3.00 to \$3.90. Veal calves—Receipts, 45; one week ago, 73; active at \$5.00 to \$6.00 per 100 lbs. Milk cows and springers, weak to shade lower; sales at \$30.00 to \$50.00 each.

E. O. Knapp sold Magee 7 cows av 1025 at \$2.70, a bull to Moore weighing 750 at \$3.00 and 5 mixed to Sullivan av 1154 at \$3.65.

Roe & Holmes sold Robinson 6 mixed butchers av 938 at \$3.25, 2 choice steers av 1165 at \$5.00, 9 mixed butchers av 775 at \$3.35 and a fat cow weighing 1240 at \$3.35.

Bergin & T sold Mich Beef Co 5 fat cows av 1020 at \$3.05.

H. H. Howe sold McIntyre 2 heifers av 655 at \$3.10, a good sausage bull to Mich Beef Co weighing 1440 at \$3.10, a heifer weighing 960 at \$4.10 and 4 common butchers av 962 at \$2.80.

Lawson sold Marx 2 steers av 870 at \$3.75 and 3 light butchers av 593 at \$3.25.

Joyce & Son sold Schleicher 10 steers and heifers av 803 at \$3.90.

Burden sold Mich Beef Co 2 bulls av 665 at \$3.10 and 1 do weighing 1100 at \$2.85.

Ackley sold same 5 fat cows av 936 at \$3.25, 6 do heifers av 976 at 1 do, a bull weighing 680 at \$2.50 and 5 fat steers av 1252 at \$4.60.

Clark & B sold Fitzpatrick 6 mixed butchers av 1005 at \$3.60 and 25 do av 889 at \$3.60.

Lawson sold Caplis & Co 3 mixed butchers av 993 at \$3.05.

Geo. Spencer sold Mich Beef Co 3 fat heifers av 1236 at \$4.30, 5 do av 786 at \$3.85 and 3 cows av 1143 at \$3.00.

Glen sold Fellows 12 feeders av 760 at \$3.70.

Lord sold Black 25 steers and heifers av 864 at \$3.97 1/2 and a choice steer to Sullivan weighing 1420 at \$5.00.

Wm. Haley sold Schleicher 12 mixed butchers av 721 at \$3.20.

Saunders sold Robinson a fat bull weighing 2250 at \$3.40.

Dillon sold Pickering 8 stockers av 690 at \$3.50.

Stoll & C sold Caplis & Co 2 fat cows av 1435 at \$3.50 and 2 fat heifers av 1275 at \$3.50.

Pinkney sold Mich Beef Co a fat heifer weighing 910 at \$4.00 and a cow weighing 1110 at \$2.50.

Weeks sold same 3 mixed butchers av 866 at \$3.50.

Lamoreaux & L sold same a fat bull weighing 1720 at \$3.60, 4 heifers av 680 at \$3.60, 2 steers av 940 at \$4.25, 3 cows av 1133 at \$3.25 and a bull weighing 900 at \$3.00.

Dennis sold Sullivan 16 steers av 1040 at \$4.10 and a cow to Caplis & Co weighing 1010 at \$2.85.

Smith sold Costello 2 steers av 745 at \$3.60.

Roe & Holmes sold Robinson 2 oxen av 1005 at \$3.50 and 2 cows av 910 at \$3.00.

Burden sold Mich Beef Co 4 steers and heifers av 772 at \$3.80.

Spicer & M sold Cook & Fry 6 steers av 805 at \$3.70 and 3 mixed av 886 at \$3.25.

Kelsey sold Mich Beef Co a fat bull weighing 729 at \$3.00, a heifer weighing 890 at \$4.00 and 3 cows av 1250 at \$3.25.

York sold Fitzpatrick 26 mixed butchers av 814 at \$3.50 and 4 do av 882 at \$3.00, 2 cows to Marx av 1015 at \$3.00 and 8 mixed butchers av 718 at \$3.50.

Roe & Holmes sold Schleicher 6 light butchers av 566 at \$3.20 and 3 stockers to Houghton av 593 at \$3.50.

SHEEP AND LAMBS.

Receipts Thursday, 450; one week ago, 623; of good average quality. Market active and higher. Range of prices: Choice lambs, \$5.80@6.00; good to choice, \$5.30@5.75; light to good, \$4.75@5.25; good mixed lots, \$4.50@5.00; fair to good mixed butchers, \$3.35@4.40; culs and common, \$2.75@3.25.

Burden sold Mich Beef Co 70 mixed av 89 at \$4.30.

Lord sold Hammond, S & Co 46 choice lambs av 85 at \$6.00.

Tarrant sold Sullivan Beef Co 29 lambs av 86 at \$5.80.

Clark & B sold Fitzpatrick 13 lambs av 64 at \$5.00, 16 av 88 at \$5.50 and 8 culs av 23 at \$3.00.

Sharp sold Black 16 mixed av 72 at \$3.25.

Bishop Bros sold Fitzpatrick 19 av 88 at \$5.00.

Weeks sold Sullivan Beef Co 22 av 91 at \$4.12.

Bergen sold Fitzpatrick 17 av 82 at \$5.00.

Roe & Holmes sold Robinson 15 lambs av 68 at \$5.35.

Hawley sold Hiser 55 mixed av 79 at \$4.40.

Joyce sold Sullivan Beef Co 22 av 105 at \$4.55.

Mayer sold Fitzpatrick 38 lambs av 97 at \$5.60.

HOGS.

Receipts Wednesday and Thursday, 3,706; one week ago, 6,857. Quality only fair.

Market opened active Wednesday, sales at \$3.30; Thursday trade opened strong to 5c higher; prices ranged at \$3.30@3.35; bulk at \$3.35; stags, 1-3 off; roughs, \$2.60@3.10; pigs, \$3.35@3.50, closing firm and 74c@61c higher than prices paid last Friday.

E. O. Knap sold Parker, Webb & Co 39 av 206 at \$3.35.

Mayer sold same 65 av 189 at \$3.35.

Stephens sold same 86 av 176 and 55 av 233 at \$3.35.

Ackley sold same 33 av 207 at \$3.35.

Lamoreaux sold same 52 av 181 at \$3.35.

Roe & Holmes sold same 53 av 212 at \$3.35.

Spicer & M sold same 89 av 190 at \$3.35.

Roe & Holmes sold same 80 av 194, 86 av 229 and 31 av 215 at \$3.35.

Harger sold same 62 av 195 at \$3.32 1/2.

Henderson sold same 97 av 182 at \$3.35.

Young sold same 38 av 214 at \$3.30.

Clark & B sold same 50 av 240 and 39 av 190 at \$3.35.

Haley sold same 73 av 212 at \$3.35.

Spicer & M sold same 122 av 200 at \$3.35.

Pinkney sold R & Webb 88 av 209 and 67 av 208 at \$3.35.

Stoll sold same 57 av 190 at \$3.32 1/2.

Reason sold same 40 av 177 at \$3.35.

Taggart sold same 130 av 180 at \$3.35.

Roe & Holmes sold Farnum 55 av 191 at \$3.35.

Kelsey sold Sullivan 153 av 179 and 18 av 353 at \$3.32 1/2.

Ansty sold same 115 av 161 at \$3.32 1/2.

Bergen sold same 81 av 165 at \$3.35.

Bishop Bros sold same 148 av 181, 38 av 182 and 14 av 239 at \$3.35.

Sharp sold same 110 av 179 at \$3.35.

Hawley sold same 95 av 166 and 17 av 222 at \$3.35.

Howe sold same 65 av 162 at \$3.35.

Joyce sold same 44 av 139 at \$3.35.

Roe & Holmes sold same 106 av 175 and 29 av 180 at \$3.35.

Perry sold same 44 av 190 at \$3.35.

Horner sold same 76 av 172 at \$3.35.

Burden sold same 90 av 169 at \$3.35.

Haley sold Sullivan 42 av 142 at \$3.35.

Messer sold same 165 av 162 at \$3.32 1/2.

Patrick & Pine sold Hammond, S & Co 59 av 207, 79 av 181 and 72 av 187 at \$3.35.

OUR BUFFALO LETTER.

East Buffalo, December 16, 1897.

Cattle.—Receipts of cattle on Monday last were 7,326, as compared with 5,236 the previous day the same day the previous week, and shipments were 4,000, as compared with 3,644 for the same day the previous week.

The market on Monday opened steady to firm for good fat light cattle, and best heavy smooth fat steers; medium lots and plain half-fed steers slow at a decline; bulls and oxen held about steady, as did fat cows and heifers; stockers and feeders were steady for good lots, but common grades were easier; milch cows and springers were in good supply and lower.

Since Monday the market has been easy for heavy cattle, while others held about steady at Monday's prices. Quotations at the close on Wednesday were as follows:

Export and Shipping Steers.—Choice to extra choice finished steers, 1,400 to 1,475 lbs, \$4.60@4.90; prime to choice steers, 1,200 to 1,400 lbs, \$4.35@4.60; good to choice fat steers, 1,200 to 1,400 lbs, \$4.15@4.30; good to choice smooth steers, 1,000 to 1,200 lbs, \$4.00@4.20; green coarse and rough fat steers, 1,000 to 1,350 lbs, \$3.65@4.15. Butchers Native Cattle.—Fat smooth dry fed steers, 1,050 to 1,150 lbs, \$4.15@4.25; fair smooth dry fed light steers, 900 to 1,000 lbs, \$4.00@4.10; green steers, thin to half fat, 1,000 to 1,400 lbs, \$3.50@4.00; fair to good steers, 900 to 1,000 lbs, \$3.50@4.00; choice smooth fat heifers, \$3.90@4.30; fair to good fat heifers, \$3.25@3.75; light thin half fat heifers, \$3.15@3.25; good smooth well-fattened butcher cows, \$3.40@3.60; fair to good butcher cows, \$2.75@3.25; common old sh

Horticultural.

For The Michigan Farmer.
MY EXPERIENCE IN GROWING
SMALL FRUIT.

Ten years ago I began to raise small fruit. In the fall I prepared twelve rods of ground, manuring it well. In the spring I bought first-class strawberry plants. These were set eighteen inches apart in rows four feet apart.

To plant my ground required 600 plants. These cost me \$10. During the summer the ground was hoed and kept free from weeds and by fall the rows were nicely matted.

When the ground froze the rows were covered with basswood sawdust; the coarsest of this was raked between the rows in the spring. The first season brought plenty of nice ripe berries.

After the crop was harvested the vines were mowed and the thickly matted rows were narrowed to a foot in width by cultivating between them. Late in the fall the ground was again manured between the rows.

The following summer also brought a fine crop of berries. That year, not counting what was used in my family, I harvested \$50 worth.

I now began to think that with more land it would pay to raise small fruit, so I bought four acres of sodded ground. I worked a quarter of this up in good shape. Set it, as at first but using my own runners, from plants which had grown their second crop.

This was my first mistake, but I had not yet discovered it. I cultivated, weeded and covered as before. The spring brought every appearance of a good crop. I began to figure, if twelve rods of ground bring \$50, forty rods will bring— But when the crop began to ripen there were quantities of scrub not fit for market, and very few fine berries.

The twelve rods, now in its third year, bore a fine crop as before, but not so large.

I kept no account of the amount sold that season but began to try to discover the cause of the failure.

By reading and talking with men of experience, I found I had made the mistake in using runners from plants having grown their second crop.

I then prepared half an acre of ground, and as my own plants were now run out, I bought 4,000 plants of different varieties at a cost of \$50.

I had now learned my first lesson. After that, I used the first year's runners, taking up all in the row except the old plants and the newest runners. These I plowed under, as they are too weak to give the best results.

I do not use barnyard manure now on my strawberry ground because it brings so large a crop of weeds.

Now, after harvesting two crops of berries, I plow the vines under, and the last of August or the first of September, sow the ground to rye.

The following spring when rye is about three feet high, I plow it under, roll the ground well and set out to plants.

In the spring I sow it well with unleached ashes, using about fifty bushels to the acre, the same as plaster would be used. This saves much labor in hoeing and weeding, also keeps the ground in good shape. I have been very successful in always having nice large berries.

I have only given my experience with strawberries. Aside from these, I set my four acres to asparagus, currants, gooseberries, red and black raspberries and blackberries.

The blackberries I consider the most profitable. This year from one-eighth of an acre, mostly the Manawaska variety, a large round berry, I sold 500 quarts at an average of 7c per quart.

Being unable to buy more land I leased twenty acres, which is also set mostly to small fruit, including 300 peach trees and 150 grape vines.

These have not yet borne much fruit, but look well.

Gratiot Co., Mich. J. D. McCrimmon.

There is a warning in the following paragraph which should be heeded by farmers and fruit growers:

The Canadians, who, at the beginning of the season, virtually held the British apple market in their hands, have lost their grip through foolish greed which induced them to ship large quantities of "culls" faced with good fruit.

HOME-MADE REFRIGERATOR.

Many farmers who have ice do not get the most benefit out of it possible because they do not make proper provision to utilize it. Often they have not the means to purchase a regular refrigerator and so go without anything of the kind. This summer I saw one made after the fashion of the illustration (Fig. 1). It is not only simple but quite easily constructed by any person who has a few tools. Such a refrigerator will more than pay for material used to construct it, in one season, by the saving of ice, and the refrigeration will be just as good as in any patent affair.

The class of material used may depend entirely upon where it is to be kept, as any rough lumber will answer for the outside, but the inside lining should be of either Georgia pine or poplar, made from 4-inch stuff. Use 2x4 hemlock for the posts and centers, so that there will be four inches of space to fill with sawdust all around and on bottom.

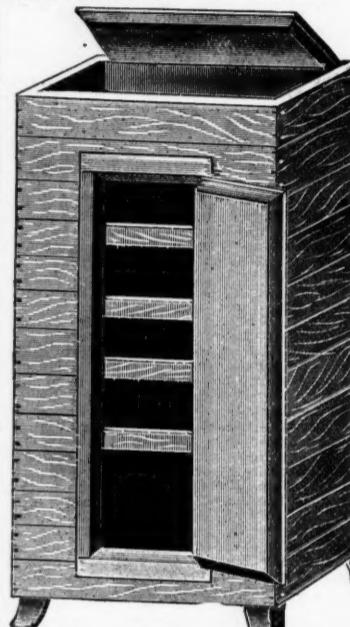


Fig. 1.

The top lid is just the size of the interior area and made from rough material in wide boards and crossed with matched lumber like that used for lining. The top boards of lid are 1½ inches wider and longer than the interior measurement, while the matched lumber is cut to fit into the opening. This opening is to put in the ice-box, lined with galvanized iron as shown in fig. 2.

The box is made twelve inches shorter and six inches narrower than the interior, so that plenty of room will be allowed for circulation. The side boards are just the length of the long way inside, and are held to their place by cleats nailed on inside. The depth is just one foot and the area can be made to suit the size one needs for ice. The height of the refrigerator should depend on the size needed. For a refrigerator 3 feet wide and 2 feet deep or back, a height of 4½ to 5 feet would be sufficient.

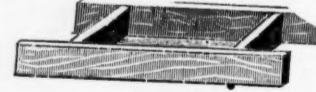


Fig. 2.

The frame for the door should fit tight and be made on a slight bevel all around. The door is made of 1x4-inch lining, doubled, with air space between, by using three boards between and nailing together and edges cut with same bevel as door frame, but should have strip nailed on all four edges to insure tight fit when closed. Shelves may be put in so they can be removed and cleaned, but should be made of strips so that circulation will not be interfered with when in use.

GEO. E. SCOTT.

For The Michigan Farmer.

FRUIT NOTES.

Two or three decades ago there was a great demand for the Steel's Red apple for orchards. Those who were setting trees must have this variety on the list, and if they were grafting it was what was wanted for scions. But we do not find many of the trees now. They did not come true to name. In a majority of cases we think they were Baldwins.

Some years ago a representative from one of the large nurseries on be-

ing asked why so few of the trees which were sold for Steel's Red had proven to be of that variety, admitted that the companies had made a practice of substituting the Baldwin, even though they had a stock of the former. The reason for this, he claimed, was because the Steel's Red was not a thrifty tree and customers were quite apt to be disappointed. Not so with the Baldwin. This tree would grow vigorously and though not what it pretended to be was likely to prove satisfactory when it came into bearing. He could get the tree if it was especially demanded, but his instructions were to sell the Baldwin in its place if he could.

We were recently speaking about this scheme of the nurserymen to an experienced orchardist, and were told that in his opinion the companies had done their patrons a kindness, as the Steel's Red was not desirable for the orchard. The flavor was excellent, but the tree was hard to start, a slow grower and a very shy bearer. "Set out a few trees for home use," was his advice, "but don't try to raise the apple for market. Set the Baldwin, Greening or Spy instead."

Perhaps the Steel's Red does well in some localities. It might reasonably be expected to do so. We have now and then seen trees that were doing as well as they should in the way of bearing this handsome and highly-flavored fruit, but this was only for one year. How well these trees could be depended upon for a succession of seasons we do not know. Wherever it does succeed well it ought to be a favorite.

* * *

The Northern Spy has been largely planted, but has not always met with favor. The complaint has been that the fruit is too easily bruised. It is true that it will not stand such usage as the Baldwin, but it will stand as much as an apple ought to. In some of the best managed orchards apples are handled as carefully as though they were eggs. Such fruit is sold as a fancy product and brings a fancy price. The cost of the harvesting is greater than when done in the ordinary manner, but the results warrant the outlay. Among those who are willing to take extra pains in picking and packing the Spy is in high favor.

Another trouble with the Spy is found in its slowness to mature. The tree needs, we are told, about twenty-five years of growth before it will produce much fruit. But when it gets its roots deep into the ground it is prepared to feed abundant crops for a long period of years. It is this shyness in bearing that has caused many to become discouraged and graft the trees to varieties which mature quickly. We believe, however, that this is usually unfortunate for the owner. By the time these grafts are ready for bearing the original trees would, in most cases, had they been left alone, been mature enough to produce satisfactory crops of a superior fruit.

A man who has had considerable experience with the Spy advocates setting the trees no nearer than forty feet in the row. This would mean only twenty-seven trees to the acre if set in squares, or thirty if the hexagonal plan is followed. For large, old trees this may be close enough. The discouraging feature is the long waiting necessary before much is to be expected in the way of fruit, but after such an orchard has begun to bear it should be good for a long time.

The Baldwins can be planted two rods apart, which gives forty trees to an acre if in squares and forty-five in hexagons. The trees should soon begin to bear, and might be expected to be a source of profit long before the Spies were ready. But if the trees have done well we doubt if they are, on the average, of much value after thirty years, at least we judge so from the orchards we have seen. Then which is the better plan to follow, plant the quick-growing varieties and get what we can out of them in the shortest time possible, or plant long-lived varieties and trust to the distant future? Perhaps a combination of the two would be desirable in the majority of cases.

* * *

An experiment with an orchard is given in the American Fruit Culturist, which should interest some who have young trees. A part of the orchard was sown to wheat and the remainder was planted to potatoes. Those in the wheat almost remained at a standstill. None of the new growth was more than half a foot in length and very little was more than one or two inches. Where the potatoes were the trees put out new shoots from eighteen inches to

three feet long. The latter were kept well cultivated. In the first case one year was practically lost, so far as the trees were concerned. This was only one of several examples. The moral is obvious. Young trees need cultivating. If any crop is grown it should be a low growing kind and one which admits of frequent stirring of the soil. Yet grain crops are frequently seen around young trees.

F. D. W.

NOVEMBER IN THE FARMER'S GARDEN.

Although the season for active gardening operations is already past for the present year, there are yet many little details that may be attended to which will greatly facilitate the work of the coming gardening season.

If the garden is to be plowed instead of spaded—and if in a form that this can be readily done, I consider it very preferable to plow—my plan is to make the application of a heavy coat of manure, and plow it under in autumn. Then when replowed or spaded over in spring, the manure becomes thoroughly incorporated with the soil in a way to give the best possible results on the growing crop.

One of the greatest points of advantage in securing an advance of a few days' time in getting my land ready for the early sowing of peas, lettuce, etc., I have found in ridging the land by throwing out trenches some three feet apart, or about the width at which the vegetables desired are to be planted, to the depth of several inches. This furnishes a sort of drainage that will carry off the surface water, and that portion of the land thus thrown up will often become dry enough to plant considerably in advance of what it would if not thus treated.

On a clay loam I have found a heavy application of coal ashes to be of much benefit in lightening up the soil and rendering it more porous, and if these can be secured and applied now and either plowed or spaded under, the gain will be found to be more than commensurate with the labor expended.

Of course, the time has now come when the later vegetables, such as winter cabbage, turnips, beets, carrots, etc., should be gathered and stored for winter use. And in this connection let me call attention to the benefit to be gained by packing in sand, or if more convenient, in common garden soil. To one who has never tried this practice it will be a most agreeable surprise to find to how great an extent it will aid in preserving the natural crispness and flavor of these vegetables.

By the end of this month it will, in many sections, be time to attend to the mulching of strawberries if winter comes on as early as it frequently does in our northern climate. This work should be done as soon as the ground has frozen up and should not be neglected.

And the mulching of raspberries—blackcaps especially—currants, gooseberries, etc., may be done at any time now, either before or after the ground is frozen. My rule with this class of plants (all except the red or sucker scion of raspberries, which I think may be too heavily manured, but don't believe it possible to hurt the others with manure) is to apply each fall or winter a very heavy mulch of coarse manure sufficient to smother down the growth of grass and weeds, and for this treatment we are rewarded with such crops of fruit as are never seen grown on half-starved and stunted bushes.

Delaware Co., N. Y.

B. E. J.

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BLUINE CO. Box 109, Concord Junction, Mass.

The Poultry Yard.

For The Michigan Farmer.
LET US BE FAIR.

In the poultry department under the title "Several Topics Discussed," in the issue of The Farmer of Dec. 4th, appears a lengthy article over the name of F. M. Bronson, in which he is elaborate in his praise of Light Brahmans, Plymouth Rocks, and some other varieties of fowls of truly recognized merit, but takes occasion to emphatically denounce the Black Langshans. Mr. Bronson probably knows what he is talking about, but his unfortunate experience with Black Langshans, as related by him, with the statement that chicken buyers did not want them at all, would have a tendency to represent the Langshan breed to be, on the whole, as Mr. Bronson pictures them, which representation would be positively untrue. The honest experience of veteran breeders of Black Langshans, as well as buyers of market poultry, will bear me out in the statement that the Black Langshan is not only a hardy breed, but also an excellent market fowl, regardless of the fact that they have black plumage and dark legs.

Mr. Bronson is perfectly excusable in portraying the many good qualities of the varieties of fowls he admires and breeds, but it is unbecoming to any breeder to give public utterance against the reputation of other breeds, and particularly to assail a variety of fowls whose honest merit and actual worth places them upon an equal with any general purpose fowl in existence.

The Black Langshans will stand upon their own merits. But let us be fair.

CHARLES B. ATKIN.

Oakland Co., Mich.

A FEW POULTRY THOUGHTS.

Dear Sir:—I was much pleased in reading F. M. Bronson's article in Dec. 4th number. In fact, I get lots of good out of his articles; but it seems to me F. M. is a little wrong. Supposing he had bought a bird of J., and J. was noted for being a first-class breeder, his strain being as good as the best, F. M. would not have cared if J. had got upon a barrel and told everybody far and near that was his (J.'s) strain, for F. M. would have had a better chance of disposing of his stock. We often see in advertisements this clause: From A.'s or B.'s strain. In my mind it is in no way a "robbery," for if the birds are good both had ought to be glad—one that his birds win in the hands of his customers, and the other that he had the good sense to buy of a good breeder.

This being a farm paper a word as to manure would not be out of place. There is lots of wasted manure in the farmer's hen-coop, and it is the richest fertilizer the farmer has. I get from fifty hens a bushel basket full every week. I have troughs for my dropping boards; they can be double or single; for a single roost, boards 14 inches wide nailed together in the shape of a trough, and a 2x2 with rounded corners placed over the center for a roost. It must be 8 or 10 inches above the sides or the hens will roost on the sides. For a double roost a foot board will have to be put in the bottom, with two 2x2s on top instead of one. Once a week take a shovel and an old basket, scrape the manure up to one end and shovel it into the basket. It makes a grand fertilizer either around trees or on the garden.

Eaton Co., Mich. JULIUS GARRETT.

SOME CRITICISMS ON CHICKENS AND MEN.

To the Editor of The Michigan Farmer.

I would like to ask friend Brown if he cleans out his cow and horse stables "every few days?" He says that is the way to treat the poultry house; and if "one is not careful they will spend more time than the whole season's output will amount to." Possibly, if he looks at it in that light, the same will apply to the care of all other stock. If a poultry house is built as it should be, and has the floor it should have, ten minutes every morning will clean it perfectly clean, and its improved appearance and the evident comfort of the biddies, will amply repay one for the trouble, which is much less, to my notion, than it is to wait till you cannot bear to go into the henhouse. Hens will do just as much better in clean, light quarters as cows or

horses will. I followed the "clean house" plan last winter—and summer, too, for that matter—and from Jan. 1st to May 1st I gathered 2,424 eggs from 50 Barred Rock pullets. "It wasn't much of a year for eggs, either." I fed a hot mash in the morning composed of two parts bran and one part corn-meal, stirred up with boiling water and a stick and seasoned with a little salt and red pepper, a handful of ground bone, and beef scraps; kept them well supplied with clean water and milk; for dinner they picked up the millet seed in the hay that I covered the floor with every morning, and for supper I gave them corn on the ear, well browned in the oven; and they gave me eggs and eggs, and eggs, and lots of pleasure, too, for I, like Priscilla Plum, love to "stand around and get acquainted" with my chicks. I just like to watch them, they are so bright, and busy, and happy, when the snow is deep and the wind howling outside.

I will tell you what we did when it was a very "cold snap." We had a little oil stove, one of those little lamp stoves, which we put up in one corner of the house, turned one of those large sheet-iron ash pails, like they usually keep in school-houses, over the stove, and fastened it down so the hens would not tip it over. It made it very much warmer in a short time. We also hung old carpet over the windows at night, and I did not have any trouble with frosted combs.

I agree with C. P. Reynolds in regard to what he says about keeping better poultry. What is ruining our poultry market is the loads and loads of miserable little scrub chickens that are annually marketed by the farmers, without any attempt to fatten them or put them in good shape for market. Not one out of twenty is fit to kill, and the wonder is that the people in the cities do not get so disgusted with the poultry that is palmed off on them that they refuse to buy a chicken at all. A man that would never dream of taking a load of poor hogs to market will take a load of the most dilapidated looking chickens imaginable without a blush. He is the man that don't go in for "high fangled notions." To pay a dollar for a "rooster" or a "settin'" of eggs would make his hair stand straight up with horror. But I think some dim idea of the advantage to be gained by keeping better chickens must sometimes penetrate that thick head of his, or he would not be around every spring trying to "trade a settin' of eggs" with someone that keeps good stock. Possibly you may think that is pretty rough, but it is the truth.

Branch Co., Mich. NELLIE REED.

EGGS PRESERVED IN CLAY.

Li Hung Chang's commissariat carried with it around the world a supply of Chinese preserved eggs for the ambassador's special use, writes A. V. Mersch in Farm Poultry. "Those wonderful eggs," said my friend, Mr. Doyle, the steward of the Waldorf, at which Li stopped during his sojourn in New York, "are not so bad after all. Here is one of them," he said to me, knowing that I would be interested in it, showing me what looked like a piece of pumice stone, but was an egg encased in clay, which was given me by one of the cooks, and may be a century old for aught I know. This is a preserved hen's egg. The process of keeping them is very primitive and simple, yet very effective. This is the way it is done: First the eggs are boiled hard; then while they are hot they are wrapped in soft clay and packed away. They will keep forever. They were brought here in bags packed in rice husk, some of which you see still clinging to the clay. These eggs are almost black, and yolks are green. They chop them very fine and decorate most of their viands with them and they enter largely into all their sauces. The duck eggs are from the Pekin and Muscovy breeds. They are first boiled then preserved in a paste of charcoal which hardens them. These duck eggs are opened, split in halves and served in the half shell, and as old as eggs are, I assure you that they are delicious." I don't perfectly understand the difference in preserving hen's eggs and ducks' eggs; but I mean to try an experiment on them this season, and will report my experience.

Mrs. Lanford Wagner, of Genesee county, who has slate colored turkeys, recommends them as very hardy.

Medical men say rheumatism is the forerunner of heart disease. Hood's Sarsaparilla cures rheumatism by its action on the blood.

POULTRY NOTES.

The National Fanciers' Association, of Chicago, will hold their second annual show, Jan. 24th to 29th at the 2d Regiment armory hall, on Michigan avenue, Chicago, Ill. The importance of this show is sufficient to secure excursion rates over the railroads, and anyone desirous of attending can arrange for cheap transportation by addressing the secretary, W. W. Hogle, 1015 Benson avenue, Evanston, Ill.

Some things are imported into the United States from foreign countries which our own farmers should produce. During eight months of the present year we have bought from abroad over a million and a half eggs. During the same months of 1896 we bought about four and a half millions. With corn so abundant that we have no market for it, our farmers should have eggs to sell to the rest of the world after supplying this country. During the same eight months of 1897 we imported nearly a hundred and fifty million pounds of rice and rice meal, 7,300,000 pounds of cheese, 21,573 pounds of butter. These are a few of the items. All of them might have been raised at home.

Next to avoiding new breeds, or more strictly speaking, those that have

not thoroughly demonstrated their qualities, one should be careful in going to the other extreme. Generally speaking, it will prove just as unsatisfactory to endeavor to keep up a flock of fowls of some unpopular breed as it will be to have no pure bred stock at all. This, of course, is speaking from the vantage point of an average farmer. If you are going to select a breed or variety be careful and not select one that is out of date. Get one that is more or less commonly bred and you will be at much less expense and trouble to keep up the quality of your stock. With varieties that are comparatively unknown, it is often difficult to find a breeder from whence one can introduce new blood; this is a very important factor where one uses but one mating, as is the case with the average farmer. Don't be afraid of keeping a breed or variety that your neighbor does. There is just as much chance for rivalry and something different as though he were breeding Plymouth Rocks, Leghorns or Hamburgs and you were handling Sumatra or Rumpless fowls or some other equally unknown and unbred breed. There is just as much satisfaction and much less care and expense in keeping well known breeds as there is with those known only among fanciers.

MEN CALL WOMAN A MYSTERY.

So She is to Them—Not so to a Woman.

A Woman's Knowledge Saves Mrs. Ebbert From an Operation.

A woman understands women as a man never can hope to. For this reason Mrs. Lydia E. Pinkham, of Lynn, Mass., now known all over the English-speaking world, set to work to help her sex.

After long and patient investigation, Mrs. Pinkham confirmed her own conclusions, namely: that seven-eighths of the sufferings of women are due to disorders of the uterine system. Reasoning on this line, she saw that the only preventive of early breaking down, was a specific medicine which would act alone on the female organism.

This was why she prepared her excellent Vegetable Compound, which has been such a boon to thousands and thousands of women. If you have headaches chiefly at the top of the head, and are troubled by painful menstruation, dizziness, sleeplessness, backache, and that bearing-down feeling, Lydia E. Pinkham's Vegetable Compound will tone up your whole system. Mrs. CHAS. D. EBBERT, 330 Wood St., Reading, Pa., testifies to the great power of the Compound.

"Mrs. Pinkham—I can say that your medicine has cured me of the pains and troubles which I had. My case was a very bad one, and puzzled the doctor. My womb had fallen and I had terrible pains in my back and hips. I could hardly walk. My husband went to our family doctor, and he prescribed medicine for me, but I found no relief, and grew worse instead of better. The doctor examined me and wanted to perform an operation, but my husband would not consent. Seeing the advertisement in the paper, I got a bottle of Lydia E. Pinkham's Vegetable Compound, and before I had taken half of the second bottle, I felt like a new woman. In all I have taken four bottles of your medicine, and can say that I am entirely cured. I hope that every woman suffering as I did, will follow my advice and take your medicine at once."

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Grange Department.

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Address all correspondence for this department to

KENYON L. BUTTERFIELD,
AGRICULTURAL COLLEGE, - - MICH.

News from Michigan Granges is especially solicited.

THE STATE GRANGE.

Just as we mail the last "copy" for this issue of The Farmer the Patrons are arriving to attend the State Grange. We believe we are to have a first-class, business-like session. Next week we hope to have a full report of the chief features of the meeting.

GRANGE NEWS.

AN OLD GRANGE REORGANIZED.

State Lecturer Jason Woodman assisted G. L. Rich in reorganizing Grange No. 519 in Van Buren county. This Grange dropped the work twenty-two years ago. It is now in the hands of the younger class of farmers, and starts under favorable conditions.

LIMECREEK GRANGE, NO. 712
is flourishing finely. A good program is given at each meeting, consisting of singing, select readings, recitations, chip basket, and our "Journal," edited at each meeting by some member of the Grange. Then comes the social part and in that all take part, and a very pleasant evening is spent.

The ladies are at work raising money to buy an organ. We have sent for the traveling library and hope to have it before long.

We have done no purchasing through the Grange except of timothy seed and binder twine, but we expect to do more.

Lenawee Co. G.
(Will G. please tell us what the "chip basket" is?—Ed.)

KENT COUNTY GRANGE.

Kent County Grange held its annual meeting in Grand Rapids on December 8. Bro. James H. Martin was elected delegate to the State Grange. The following officers were elected for the ensuing year: Master, Bro. James H. Martin; overseer, M. H. Foster; lecturer, Sister F. D. Saunders; secretary, Sister Mertie L. Preston.

Bros. H. C. Hogadone and I. D. Davis were elected members of the executive committee, and Sister Dockery to fill the vacancy caused by the death of Bro. Robert Dockery.

Resolutions were passed instructing the delegates to use their influence for the organization of a Grange Fire Insurance Company. Resolutions were also passed on the death of Bro. Dockery.

The next meeting will be held at Whitneyville Grange hall on January 5, and the afternoon meeting of first day will be open to the public, and the fifth degree will be given in the evening.

SECRETARY.

I organized a Grange at Fife Lake, in this county, last Tuesday evening, December 7th, with twenty members. Charter left open till the 21st, with good prospect of as many more. I feel like protesting against Brother Voorhees' article on "The Dark Side," as published in The Farmer of December 4. I don't believe we are behind the rest of the State in Grange work, nor have we been at any time during the last three years. I have taken pains to find out, and am able to report renewed interest in Grange work all over the county. I have in view now the reorganization of two Granges that have long been dormant.

Brother V. says there is small attendance at our Pomona meetings, but I think he wrote that before our last meeting, which was well attended and much interest manifested, several old members reinstated, and eight candidates took the 5th degree. It is true that if we cannot keep abreast with the times we cannot attract new blood. We must progress and take advantage of all that the Grange has provided for our benefit. More should be done to make the Grange attractive to young people, and more interest should be taken in their welfare by the older members. We should study our "trade relations" more and make better use of what has been provided for us in this direction.

Grand Traverse Co. E. O. LADD.

GRAND TRAVERSE POMONA.

At the last meeting of this Pomona Grange reports from Subordinate

Granges were read, showing a growing interest in the work. The annual Master's address by Lowell Sours was full of good things. Mrs. Ramsell's report as overseer gave food for thought. Officers were elected as follows: Master, D. H. McMullen; overseer, Wm. D. Bagley; lecturer, Mrs. E. M. Voorhees; secretary, F. E. Brown.

In the evening the officers were installed and the fifth degree was conferred upon eight candidates.

The last session of Pomona Grange was held next morning, Master D. H. McMullen in the chair. Committees for the ensuing year were appointed.

Judge J. G. Ramsell and wife were appointed delegates from the Pomona Grange to the State Grange to be held next week in Lansing. They were instructed to advocate Postal Savings banks.

There was some discussion on free mail delivery. Mrs. Leighton thought in case we have it in the city, the farmers should have free mail boxes in the postoffice.

Owing to the amount of business transacted, there was but little time left for exercises of a literary character, but there were some fine recitations and music, notably a song by Mrs. Morgan and an essay by D. McMullen which occupied the hour or two before dinner.

BETTER YET!

Having read the article from Capitol Grange headed "A Record-Breaker," and asking if any Grange in Michigan could show a better record, I thought a few items from Bainbridge Grange No. 80 might be acceptable. Two years ago our Grange had a membership of about sixty-five; now we have one hundred and sixty-five in good standing, with several a little back on dues, a part of whom will probably pay up, and four applications received last Saturday evening.

Last spring we gladly gave our consent to organize a Grange at Millburg, partly within our jurisdiction, knowing that it was for a worthy cause. They already have a flourishing membership of about seventy. Our Grange visited them November 20, our members furnishing the program, and they furnishing an excellent supper. January 8th they will visit us, and the order of things will be reversed.

We hold weekly meetings, generally well attended, with good programs and wide-awake discussions. We have a well finished and furnished hall, 64 feet, two stories high, with good stabling in connection, and are out of debt.

Our Grange purchased berry crates by the carload, in the flat, the past season, with fairly good results.

A State Farmers' Institute was held in our hall December 10th, with Prof. Kellogg as conductor, the brunt of the local work devolving upon our members. We are earnestly striving to improve our condition financially, socially and intellectually, believing that if what Wilmer Atkinson says is true, that "the farmers should have seats at the first table," they should be able to fill them with grace and dignity.

We earnestly look to the agricultural press to disseminate the views of our most intelligent farmers, and to promote the most progressive ideas and reforms for the future welfare of the American farmer.

EDWARD N. MATRAN, Master.

Berrien Co.

NATIONAL GRANGE.

PORTION OF REPORT OF WORTHY LECTURER.

Worthy Master: It is a cause for rejoicing that in the inception of this grand fraternal organization, the founders of the Order seem to have been inspired with the thought that the uplifting of the farming population of this country, and the prosperity of the nation, depended largely upon the degree of intelligence which they might possess, in connection with a general knowledge of those economic and political questions that have such an intimate relation to the interests of the people, and the affairs of state and nation.

To obtain this knowledge and use it for their own and their country's good, called not only for organization, but for a school of thought and development, whereby the latent intellectual powers of the strong and vigorous minds that are brought into life and activity on the farm, might be so trained and developed, and directed along such paths as lead to the highest type of citizenship, and thus make their influence more potent in society, more effective in battling against the forces of evil, and more powerful in main-

taining a just and beneficent government "of the people, by the people and for the people."

EDUCATIONAL WORK OF THE GRANGE

The central thought of the educational work of the Order of Patrons of Husbandry, is to dignify the rural homes of the nation and develop in them an exalted type of character and true American citizenship. The farmer's home is the key to the situation, and if the farmers of the nation are intelligent, broad-minded, thinking men and women, and act in accordance with their convictions of right and duty, there need be no fear about the future of the greatest republic of modern times.

The educational work of the Grange is not for the present only, valuable as that may be, but it reaches out into the future, and will have an influence in solving the problem of self-government, or government by the people, which, sooner or later, must be the government of the entire world. The Grange, then, not only has a grand opportunity before it but a great responsibility resting upon it to so fulfill its mission by educating and developing its members along those lines of thought and action which will bring greater contentment and happiness to their homes, insure peace and prosperity to the nation and make it the bulwark of liberty for all time to come.

The curriculum of the educational work of the Grange, if I may so speak, is entirely different from that of the school and the college. While the latter is in a large measure theoretical and disciplinary, and applies to the conditions of youth, the former is largely of a practical nature, relating to home life, current events, economic conditions, and the ethics of government. Hence it is that principles and conditions, instead of text books and rules, furnish the bases of thought, the occasion for investigation and study, and the themes for discussion in the Grange. The spirit of inquiry is abroad among the farming population of the land. The members of the Grange are asking for mental food, and earnestly seeking the solution of such problems as seriously affect the interests of agriculture and the future welfare of the nation. Right here is where the opportunity lies, and the responsibility rests, to give such direction and trend to the thought of the membership of the Grange, and to offer such suggestions to aid in the discussion of the questions before them, as will tend to increase the love of home among our rural population, to give them clear conceptions and unbiased minds, and thus enable them to discern between truth and error in solving the intricate problems before them, for the good of all the people.

MEETING OF STATE LECTURERS.

In this connection I desire to call your attention to the seeming necessity of some movement looking to greater concert of action in regard to lecture work. It seems to me that if some provisions could be made whereby State Lecturers would be able to meet the National Lecturer, and carefully consider the lecture work in the various states and in the country at large and more satisfactory results could be secured from the same amount of labor. This would be in the direct line of efforts that are being made to systematize and give greater uniformity to the educational features of the Grange.

On account of traveling expenses, it might not be best for all State Lecturers to meet in one place. Six or eight states could be grouped together and a meeting called at some central point with comparatively small cost. The plan of lecture conferences has been tried in several states with most gratifying results, the State Lecturer meeting the Subordinate Grange Lecturers in the several Pomona jurisdictions. I ask your careful consideration of this suggestion.

STATE LECTURERS.

The success of the lecture work for the past year has largely been owing to the hearty co-operation and individual efforts of State Lecturers. In those states where the means have been provided, the State Lecturers have been almost constantly in the field, to enlighten the public in regard to the objects and aims of the Order, to give encouragement to Subordinate and Pomona Lecturers, and to carry forward the plan of more systematic and efficient lecture work.

FIELD WORK.

During the past year more of my time has been employed in field work than during the preceding year, and at times, especially during the months of August and September, I was un-

able to meet all of the demands upon my time. Field meetings, picnics and Grange fairs are on the increase, and there is a corresponding increase in the demand for Grange speakers. But fortunately this demand is met by scores of talented young farmers, who are yearly coming to the front as platform speakers by reason of their education and experience in Subordinate and Pomona Granges.

Too much cannot be said in favor of these public gatherings if they are conducted on non-partisan and non-sectarian lines.

THE PRESS.

In giving credit for this good work the public press should not be omitted. While some are pleased to make sweeping declarations and denounce the press in general as the enemy of public good and the creature of corporate greed and unholy combinations, I am free to say that in my judgment a majority of the newspapers of this country are as free from corruption as those who make the charges, and they are striving as best they can, and with honest intent, to represent the best interests of the people. Aside from the papers that are devoted wholly or in part to the interests of the Order, there are hundreds of farm and general newspapers in all parts of the country that are in hearty sympathy with the objects of the Grange and the noble work which it is doing, and are rendering efficient service in advancing its various interests. In this connection I wish to say that the value of newspapers to the Order would be greatly enhanced if the membership would furnish more Grange matter for them to publish. While there has been progress in this direction, very many of the members have not fully learned the lesson of self help in advancing the cause in which they are engaged. They still depend too much upon others to do what they can and should do themselves. The farmers of this country must fight their own battles, and they are abundantly able to do this, if they will make proper use of the talents and opportunities that are given them.

CONCLUSION.

In conclusion permit me to say that in the face of hard times and depressed conditions, the work of the Grange has moved steadily forward, and the record of the past year not only shows large gains in membership, but gains have been made in all the departments of its work. In none, however, has greater progress been made than in its educational work. Wherever faithful, persistent labor has been performed by State and Subordinate Grange Lecturers, prosperity has dawned upon the Order. The lecturers of State, Pomona and Subordinate Granges who do their duty are building for themselves monuments that are more enduring than marble or granite, for the record of good deeds and helpfulness to others is written in Heaven. There is an inspiration in trying to do good, to make better society and better government, and as the prospects for material prosperity in this country are brightening on every hand, not only the lecturers and other officers, but all the members of our grand fraternal organization, north, south, east and west, should unite their efforts and with one accord strive during the coming year to place the banner of the Grange in a higher position on the battlements of truth, of justice, and of right, than it has ever occupied in the years that are passed.

Fraternally submitted,
ALPHA MESSEY,
Lecturer National Grange.

TRIBUTE TO THE GRANGE.

In his address before the National Grange Secretary of Agriculture Wilson said: The National Grange represents the farming class of our people; the half of the nation, the conservative half, the quiet, thinking half, the people who act as referees when there is commotion and settle things rightly. I congratulate you on the important position you occupy and the dignified manner in which you discharge the responsibilities resting upon you, that are not circumscribed by state lines, but grasp the entire country within their span. You do not enact statutes, but your counsel is sought by the lawmaker, and when he is heedless in exercising power you are sure to be judicious in further extension of it. You recognized the need for education and object lessons in the sciences that relate to agriculture and asked for colleges, experiment stations and a department of agric-

culture, that are all engaged in making plain the secrets of nature as they relate to climate and soil, plant and animal, in their relation to mankind and his happiness.

"These instrumentalities succeed and are helpful as you are interested in them, or neglect them, in the several states of our country. The scientific student of the farm is making household words and fireside talk of what has heretofore been an unknown tongue.

"The department of agriculture is trying to help the individual and the state where its arm is longer than theirs and its facilities great. It is opening up new markets, introducing new plants, gathering facts for producers at home and abroad to the end that they may be better informed regarding their work and the operation of those, the world over, with whom they compete.

"The time is auspicious for pushing this work. Our good-hearted president instructs me to make the department useful to every locality in our broad land, sympathizing as he does with the toilers in the field, and forest, factory and mine, and with all home-makers, where woman reigns as mother, daughter and wife, the only correct unity of society, and the safeguard of the republic."

PUBLIC GRANGE MEETINGS.

It requires tact and good judgment to hold a successful public meeting under the auspices of the Grange. These meetings are generally held for the purpose of creating a favorable impression of the Grange on those who are not members. A public meeting, simply as a public meeting of the Order will amount to but little. One or more definite objects should be in view, and all the efforts made should be directed to that end.

If a speaker from abroad is to be secured, he should be a man or woman whose experience and ability are such as will tend to assist in advancing the object or objects sought; a committee of one with full power to act should be appointed to secure the speaker, and it should be distinctly understood what the compensation is to be. It is very embarrassing for a speaker to be called from a distance and after the meeting be obliged to speak of the matter of compensation to those who have the meeting in charge.

The next thing is to thoroughly advertise the meeting. No meeting of this kind should ever be held if the members of the Grange are not ready and willing to take hold of the matter and use their best efforts to make it a success. Every member of the Grange should be a committee in this direction and labor unceasingly to have a good meeting. Printers' ink is very cheap, and should be freely used to let the public know when and where the meeting is to be held and who will be the speaker or speakers, but printers' ink cannot do all the advertising that is necessary. The proposed meeting should be constantly before the minds of the members and personal invitations should be given to those whom they desire to have present. If these people cannot be seen, a postal card costs only one cent.

The next thing is to provide for some exercises besides the speaking. No speaker at such a meeting, no matter how brilliant he may be, can fully satisfy those who will be present. Some good music should always be provided, and if there is but one speaker some recitations, essays and short talks by one or two local speakers should be provided. The music, recitations or essays should be of a high order so as to create a favorable impression of the progress of the Grange and the work that it is doing, and last, but not least, a good presiding officer should be selected who can preside with dignity and ease.

The success of any meeting of this kind depends quite largely upon the efficiency of the presiding officer. The speaker should not be introduced simply as Mr. So and So. A few pleasant words from the chairman of the meeting in regard to the speaker will at the outset have a tendency to establish a sort of friendly relation between him and his audience that will be of mutual advantage. A friendly greeting by the audience in the way of applause makes it pleasant for the speaker when introduced, and if the speaker in his address makes some good points it is not only an encouragement for him, but a duty of the audi-

ence to show their appreciation of the sentiments expressed by generous applause. It costs nothing, it makes an audience feel better, and it helps the speaker.

A public meeting arranged and conducted in the main in this way will be worth something. It will not only please the public and draw their attention to the Grange and its work, but it will be helpful to the members as well, and they will feel that they have "value received" for their efforts and the expense incurred.—Lecturer National Grange.

EDUCATION.

IS IT AS ESSENTIAL TO THE SUCCESS OF FARMERS AS OF PROFESSIONAL MEN?

(Read at Lenawee Pomona Grange.)

I can answer this question very distinctively with the little word, yes.

Education means learning, knowledge, and the art of knowing without studying up or learning the answer after the question has been given. The lawyer, doctor and minister of the Gospel are of the professional class, and education is accountable for the larger part of their success; but you have heard of, and possibly have seen, men who might study until "Doomsday" without becoming successful professional men. It seems natural for some to be lawyers, others doctors, and some farmers, and so on, and there is some certain kind of work each one of us can do best. Therefore I think that if a person was intended for a lawyer he should study for it and not squander his or her life away trying to be a doctor or minister, and then fail in the attempt. Such persons, if they can tell in their youth what their occupations should be, should strive for that kind of work at once, and they will be the more successful and prosperous in years to follow. The same rule will apply to the farmer. If a boy takes to farming, that is his place in the world, and leads to what I call education. It is the knack of succeeding. When a boy or young man is educated on the farm he is pretty sure to succeed. But some never become educated, while others will graduate, as it is called, in a very short time.

For illustration: What would you think of a person who would plant peas as we do field corn, from three to four feet apart each day, and put from three to five peas in a hill? Would you call that successful farming? No. It would be termed a waste of land; also a lack of education. If there is no education required in the process of farming, why are we so very particular to get our crops in at a certain time? And if we do not get our seed sown at the right time, or nearly so, we are almost sure to lose the entire crop. You may call it experimenting if you wish, but it is the education that teaches us to take our farming in its time and grasp every opportunity while it is "on the fly."

This education was getting dearer every year, when wheat was forty-eight cents a bushel, oats fifteen to eighteen cents, with a fair outlook for corn in July; but the August drought would nearly dry up everything, followed by early frosts. This is where the farmer needs to use his energy, skill and all the education at his command, or his mortgage will likely be more famous than his loans.

Please go with me and visit two common district schoolboys, one desiring to become a minister, the other a farmer. The former would enter college and attend four years, and then likely secure a position and bargain with the church people at a small salary. The latter may attend the Agricultural College or not, as the case may be, live an enjoyable and comfortable life, and be quite sure to prosper, and in many cases become wealthy.

Therefore, in my estimation, it is as essential for the farmer to have a liberal education to bring him to success as for the professional class. Every person should have a liberal amount of book learning, but a college course is not essential in all branches of business for people to secure their livelihood.

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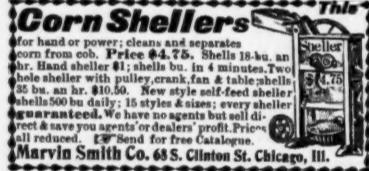
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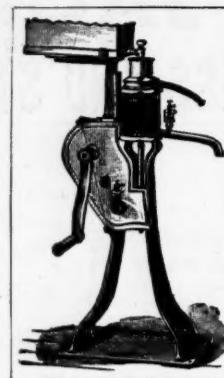
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| " | 9.....0.04 | 14 " 0.03 to 0.05 |
| Vermont, | Jan. 13.....0.01 | Wisconsin, Jan. 4.....0.03 |
| " | 28.....0.02 | " 5.....0.02 |
| " | 29.....0.03 | " 21.....0.03 |
| " | 30.....0.04 | South Carolina, April 23.....0.04 |
| New Hampshire, Feb. 18.....0.01 | " 19.....0.04 | " 24.....0.05 |
| " | 10.....0.01 | " 30.....0.04 |
| Massachusetts, Feb. 10.....0.01 | " 12.....0.03 | Michigan, Mar. 10.....0.05 |
| " | 15.....0.03 | " 10.....0.05 |
| Illinois, Mar. 12.....0.01 | " 15.....0.005 | May 19.....0.06 |
| Ohio, Jan. 15.....0.02 | " 2.....0.00 | Nebraska, Jan., 1897, to |
| " | 15.....0.02 | Mar., 1897, to |
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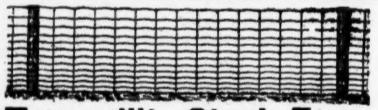
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